Soviet Asia : democracy's first line of defense / by Raymond Arthur Davies and Andrew J. Steiger.

Davies, Raymond Arthur, 1908-
New York : Dial Press, 1942.

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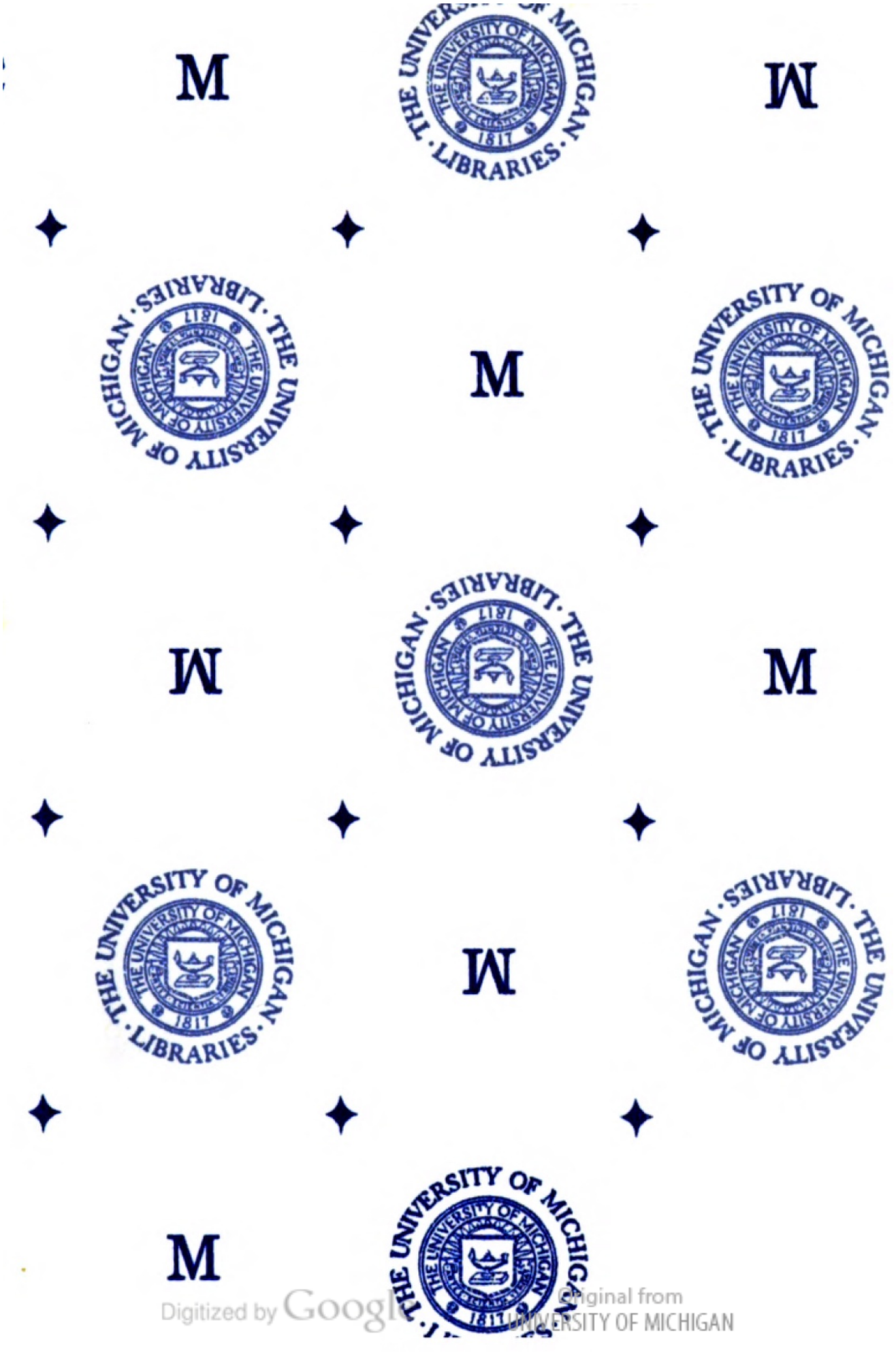
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Soviet Asia

Democracy's First Line of Defense

By Raymond Arthur Davies

and Andrew J. Steiger

THE DIAL PRESS

NEW YORK · 1942

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To the Brave Soviet People
Whose Struggle Against the Forces of Darkness
Has Aroused the Admiration of the World

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Acknowledgment is gladly made to

VIOLA IRENE COOPER,

Who conceived this book,
Brought its authors together
And labored with them tirelessly
On its creation

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Foreword

IN A WORLD BECOME A MANY-RINGED CIRCUS OF CONFLICT, one of the most glaring spotlights has suddenly been turned on Soviet Asia. Yet, considering the strategic importance of this vast area, very little is known about it to the average American. This is to be regretted. Not only is America's future closely bound with that of Soviet Asia, but the Americans have a great deal to learn from Soviet Asia, both historically and in immediate significance. The economic strength and military potential of Soviet Asia are crucial in the present (Summer, 1942) Pacific situation.

We present our study of Soviet Asia as we have seen it. We have crossed it at different times from the Urals to the Pacific and from the Caspian almost to the borders of China. We know that Soviet Asia much resembles America in spirit. Its size, its high-pitched activity, its youthful exuberance are typically American. But the most important fact about this huge complex new world of Soviet Asia is that—it "works." True, it doesn't function like clockwork. But this is not surprising, considering that even its oldest modern developments are less than twenty years of age. Side by side with inspiring and exciting factories, schools, theatres, there are backward, negative phases that deject the American observer. We saw a great deal of poverty, much dirt, remnants of illiteracy. Yet somehow these were not important—because the Russians themselves are aware of them and are doing their utmost to overcome them. Their scathing self-criticism, as expressed at meetings, in the newspapers, on the radio, has no equal for devastating sharpness—and sincerity.

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We were often driven to distraction by red tape and bureaucracy and slovenliness and inefficiency.

And yet we were not affected deeply. Somehow, in the enormity of the creation of a new world they seemed small and insignificant. They were part of a world in travail, part of a Russian Telluride, a Leadville, a Klondike, a Union Pacific Railway in construction.

What emerged as important was the fact of the rise of men from an ignorant past to an enlightened present; important the number of schools and students, of hospitals and doctors, of laboratories and research workers, new industries, new railways, thousands of miles of airways, and new varieties of grains for the frozen north. The Russians, as we saw them at it, are conquering the Arctic and the Desert.

Finally, the birth of a new democracy was unmistakable. While some few lingering hostile elements are denied the privilege of equality, millions actually possess and are exercising their rights as citizens with astonishing zeal. The citizens of Soviet Asia are not a leaderless, equalitarian mass. Quite the contrary. There are among them leaders directing the masses along the paths of what they call "socialist construction." And the leader of leaders is Joseph Stalin. For an American it is difficult to understand the deep love of the Soviet Asian peoples for this man. Yet this love exists, and since the Nazi invasion it has unquestionably grown still deeper. Stalin's speeches and articles, as Lenin's, provide a blueprint of Soviet development. We quote them extensively to show the underlying reasons for Soviet Asian policy.

We have not visited all of Soviet Asia. For this, however, no apology is needed. No man ever has seen all of this great slice of the earth. For some of our facts we have had

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to rely on official statistics and newspaper reports, checked against recent developments and eyewitness stories. On the basis of what we ourselves have seen we believe that everything in our book is fully true.

Our statistics are in round figures. Insofar as they refer to the present they are approximate. In Soviet Asia changes occur so rapidly that one can hardly keep pace. A good example is population. In 1939, Khabarovsk Territory in the Far East had 1,430,875 people. Since then the figure has been increased by tens of thousands of immigrants from regions occupied by Nazis. This kind of mass migration has affected all statistics: production, agricultural, armed forces. But with this limitation our figures are the latest available.

It is our hope that the information we are offering in this book will strengthen the spirit of kinship that is so rapidly growing between the people of the United States, Canada, and the Soviet Union.

RAYMOND ARTHUR DAVIES
ANDREW J. STEIGER

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Toward a Pacific Partnership

SOVIET ASIA IS A LAND OF SUPERLATIVES. ITS ALMOST ASTRONOMICAL distances are inhabited by scores of races, living in a dozen climates. Deserts. High mountain ranges. Interminable forests. New railways, newer highways, still newer industrial plants, some built too recently to appear on maps. Great armament works. Gardens above the Arctic Circle. Research laboratories on drifting ice. Observatories in the Pamir heights. Wheat fields in the central latitudes, cotton and sugar-beet acreage in the south. New watercourses in formerly arid wastes. Schools and universities where two decades ago not even an alphabet existed. Lines of fortifications. Naval bases. Air bases. People—newly young, enthusiastic, energetic; workmen, keen hunters, gold prospectors, scientists, soldiers, sailors, aviators. Great dreams. Greater accomplishments. A juvenile boastfulness of growth. All this is Soviet Asia, land of the future, a world in adolescence!

Soviet Asia is America's next-door neighbor and the backbone of Russian strength on the Eastern front. Its military installations, armed services, resources, industries, established and operating communication networks with European Russia, with China, India, the Middle East, and via the North Pole with Canada and the United States, hold the key to decisive victory against the Axis, both in Europe and in the Pacific. From Soviet Asia's territory alone can decisive land-based attacks be launched against Japan. Soviet Asia possesses an almost inexhaustible store-

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house of strategic war materials available to the enemies of the Axis.

For all these reasons Soviet Asia is likely to become the keystone of the partnership now forged by the United Nations, and especially between the United States, Britain, the Soviet Union, China, Canada and Australia. Within this partnership Soviet Asia will be mighty not alone in time of war, but in time of peace. Its industrial and political development offers strong assurance for successful and stable postwar reorganization and a progressive reconstruction of the whole East.

This amazing new world owes its existence to two of man's newest implements of progress—the airplane and the radio. Without these "killers" of time and space in continental transportation and communications man could never have conquered, peopled, and developed the entire country. Certainly not in time to play a decisive part in the present global struggle. Without them, Soviet Asia would have been doomed to backwardness and isolation. With them, it has been projected into the very forefront of the world of today.

Soviet Asia unfolded itself before us in an endless panorama of industrial and agricultural activity as, curiously, we gazed out of the windows of the train on our first trip east from Moscow. We passed large settlements, towns, even cities, which a few years ago either had not existed at all, or had been small villages. Out of the unmapped wilderness there rushed to meet our train extensive structures of new plants, elevators, mine shafts. Black fumes from tall smokestacks testified to unremitting labor.

As we approached the eastern gateways to the outside world—Manchukuo, Japan, China—we realized, and became grateful, that Soviet Asia is really a part of our own

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world, a world on an American model, but being constructed on an even grander scale; that, in common with the rest of the U.S.S.R., Soviet Asia is "a land of hope and glory," a term which we Americans, in the past, claimed for ourselves alone. In crossing Soviet Asia we, as observant Americans, could not help but feel, unless we were to refuse to see and to believe our own eyes, that before us unfolded a world of the future in embryo. This impression was fortified by the youthfulness of the people, the newness of system and industries, the obvious incompleteness of everything.

Our admiration grew apace as, with intense interest, we noted the extent of Soviet military power in the Far East. As foreigners, of course, we were not permitted to see that which was truly secret—the gigantic fortresses buttressing defenses opposite Manchukuo, some of which are said to be seven stories deep, the secret underground airplane hangars and tank depots, the camouflaged barracks. But we heard many stories and many legends about them, and there were no rules to forbid our noting that men of the Far Eastern Red Army operated the trains on scheduled time.

We sped by warehouses with Red Army men on sentry duty guarding stocks of war supplies. We saw airports crowded with airplanes. Today, in view of the historical developments since our last crossing of this vast area (1940), we know how fortunate it is for the Allies that as a logical corollary of years of national construction and basic anti-Fascist policy, the Soviet Union did not neglect its Asiatic portion when formulating its Five Year Plans, but foresaw its vital importance for the Soviet people and so launched effective measures for its intensive development.

The unremitting cultivation of Soviet Asia and the

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Soviet Union's position in the present world situation demonstrate more forcefully than ever before that in all respects—geographically, economically, politically—the Russians, Americans, Canadians, Australians, and Chinese have long been suited for partnership in the North Pacific. It was not the Russians' fault that this partnership did not come to consummation earlier. It was the fault (is there anyone who will deny this today?) of the unrelenting campaign of the Fascist and pro-Fascist forces in every land, certainly not in the Axis countries alone. Those who fear the impact of the Soviet social experiment upon the people of the western world have played directly into the hands of the enemies of democracy.

Psychologically, the Russians have been ready for partnership with the United States and Canada for a long time. Their ties with us are really very close. They have always admired our civilization. Their very slogan "*Dognat i Peregnat*—Overtake and Surpass," the keynote of the Five Year Plans—was designed to encourage the people to learn from us so as to improve upon us. They have never looked at Americans as quite the same kind of foreigners as others.

This is illustrated by an incident that occurred when we spent a few hours at the home of a Ural worker. When proudly introducing us to the whole family, our host explained to his mother-in-law, "They are foreigners, but not Germans." She was an elderly peasant who believed, in common with many folk of the old generation, that all aliens were *Nemtsi*, which means, literally, the mute and speechless foreigner. It is also the word for German national.

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"They are Americans," our host elaborated, "from the United States!"

"Well, I do declare!" the old lady exclaimed, with brightening eyes. "My Singer sewing machine was made there. Long ago my father bought it for me. It's a good machine still."

"Yes, and that's where the big machines of the Sverdlovsk Works came from," added her son-in-law.

American. That's the word for efficiency and progress. Was it not Colonel Hugh Cooper who supervised the construction of the great and symbolic Dnieper dam? Was it not the American, Big Bill Haywood, fresh out of an American jail where he served a term for syndicalism, who went to Russia in the early 1920's to help start what has become one of the Soviet's and the world's greatest coal and metallurgical bases, Kuzbass? Was it not the Harvard graduate, John Reed, who first sang to an incredulous world authentic praises of the November Revolution in his *Ten Days that Shook the World*? And earlier was it not John Paul Jones who because of his naval accomplishments during the American Revolution was invited by Empress Catherine the Great of Russia to assist in commanding the country's fleet in the fight against the Turks? Had not Catherine flatly refused George III's request for troops to be used against the rebellious colonies? The United States, in fact, still has a debt to repay the Russians for formulating in 1790 the principle of Armed Neutrality which helped the United States after the American Revolution, and which has since become one of the foundation stones of the American doctrine of the freedom of the seas. And, during the Civil War, did not Russia send part of her fleet to New York, ready to help the North in its fight against slavery?

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Yes, historically, the roots of American-Russian-Canadian partnership are deep. Decades ago when Russian Asia was little more than a miserable colony of the Czars, Russian, American, and Canadian explorers, hunters, and traders regularly crossed the North Pacific channel separating the two continents. The Russians settled Alaska, which the United States later bought for $7,200,000, —less than the present assessed valuation of one Alaskan town. In the late nineteenth and early twentieth centuries the Hudson's Bay Company maintained fur factories on Russian territory. In 1865, an American company began explorations for a Russo-American telegraph line from the Amur River via the Bering Strait to British Columbia. Russian engineers, experienced in the building of railways in frigid zones, helped lay the Canadian Pacific Railway.

No, it was no wish of the Russians to be isolated from us. In the nineteen thirties Foreign Commissar Maxim Litvinoff appealed, repeatedly, and with admitted sincerity, from the tribune of the League of Nations for united resistance of the democracies against the encroachments of Fascism. "Peace is indivisible," he warned us, "the defense of peace is indivisible," but the democracies would not listen. We see it so clearly today—the Russians wished to become our friends. They appealed to the democracies, especially the United States, to cast their influence and might with them into the scales of anti-Fascist struggle.

We Americans (and Canadians), safe as we thought we were under the protection of our three and five thousand-mile ocean walls of isolationism, rebuffed the proffered hand of the Russians. For years, we refused to consider their proposals for mutual struggle against the menace of Hitlerism; we encouraged the pro-Nazi leaders of Finland; we would not sell machines and materials to the Russians

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that would enable them better to prepare against the day of reckoning with the Germans. Canada until 1942 refused even to maintain diplomatic relations with the Soviet Union. But the day of our refusal to cooperate with Russia is past. Rare is the American—continentally speaking—who has not the deepest respect for the Russians and a growing admiration for the heroically fighting Soviet people.

Ask the average American the childishly simple question: "Where is Soviet Russia?" and you would probably be answered: "It lies beyond the Atlantic, beyond Britain and Germany and Poland, away on the other side of the world." Perhaps only now are Americans beginning to realize that "Russia"—or at least its Asiatic part—does not lie "away on the other side of the world", but just 56 miles from continental United States territory.

It was Hitler's sweep into Russia that first shocked not only the United States and Canada but all of the Americas into a realization of the Soviet Union's importance, and particularly the meaning of Soviet Asia in our scheme of hemispheric defense, a fact attested by any map. We remembered suddenly, almost in amazement, that Russia, after all, is only fifty-six miles away from us across the Bering Strait. We recalled, also with somewhat of a shock, that for years (until the Hitler invasion) we had lived without ever worrying about the inhabitants, the political beliefs, and the intentions of that sector of the world.

"For twenty-three years," said Wendell Willkie, soon after the beginning of the Nazi invasion, "the Communists have been on the Bering Strait and we've never had any reason to fear that they would attack us across that narrow water . . . Russia has never been a military or trade menace to us."

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Why, then, had a hue and cry been raised in a large portion of the American press against the fortifying by the Soviet Union of Big Diomede island only a few miles off our shore, as reported by Delegate Anthony J. Dimond of Alaska? Attempts were made to whip up public sentiment against this on the ground that Russia was endangering our safety. Today there is not a man or woman in the United States and Canada who does not fervently hope the Russians are sufficiently powerfully armed in that region to help us defeat Japan.

Soviet Asia and the adjacent portions of European Russia, unoccupied by Axis forces, form the sole area left to anti-Axis powers in Europe and Asia where internal lines of communications are still available for the distribution and transfer of manpower and supplies from front to front and from supply base and factory to front. With the exception of those located along the easternmost and westernmost reaches of Soviet territories, these supply lines are practically invulnerable to attack, at least within the immediate future. Along the Arctic coast, Soviet Asia has the sole remaining sea route in the world that is almost completely safe from enemy attack. This route connects Archangel with the Soviet Far East, Alaska, British Columbia, and the states of Washington, Oregon, and California. It is navigable for from three to five months of the year. And the news from London is that efforts are being made to keep it open by means of ice-breakers during most of the year.

Soviet Asiatic regions enter into the military-strategic aspect of almost every front, excepting the Libyan and the Atlantic. And even there events will depend to a large extent upon what happens on the Eastern front. The indus-

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trial Urals (whose current production of certain war materials is almost as great as that of the entire Soviet Union prior to the war) where many plants from Nazi-occupied regions have been moved, are pouring out guns, tanks, and planes for the use of the Soviet armies and, together with Kazakhstan and the Central Asian republics, have taken over from the Donetz basin and the Ukraine, the task of furnishing strategic raw materials to hundreds of crucially important factories lying west of the Volga River. Recently, a *New York Times* correspondent* reported that the chief engineer of a Moscow factory, Vassili Nikolaievich Taktaroff, had explained to him "how one large plant had been partly evacuated to the Urals on thousands of flatcars," and "that the new Ural branch is already producing goods for the Red Army and of the peacetime type. . . ."

The Central Asian republics of the Uzbek, Tadjik, Turkmenian, and Kirghiz peoples are supplying the armed forces and can themselves in case of need become supply bases for Allied armies fighting in defense of the whole southern Asiatic theatre from the Mediterranean to India. Kazakhstan, the great inland empire, stretching from just beyond the Volga to the Chinese province of Sinkiang, has already served for years as a feed line for aid to China. Today it produces strategic raw materials for Soviet war industry. The Soviet Far Eastern regions—the Maritime and Khabarovsk territories stretching into the very backyard of America—form the western segments of a great pincerlike defensive line that runs from San Diego through Seattle, British Columbia, and Alaska to the coast of Soviet Asia and Vladivostok. That this pincer may some time be closed is Japan's greatest fear. Tokyo's war lords are aware

* Ralph Parker, *New York Times*, Dec. 29, 1941.

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of the menace of attack of American and Canadian bombers from airbases along the Soviet segment of this line.

Experiences of the recent past have proven that the strongest weapon of the Soviets in resisting the foe has been the loyalty of the people, and there is none more loyal than the inhabitant of Soviet Asia. To him, the Soviet system has given new life, culture, learning, and the vision of a brilliant future. There no fifth columnists, no Quislings! We saw no fear, no wavering when we were in the Soviet Far East. The people gave every indication of understanding thoroughly for what they might some day have to fight. Some observers, notably Americans, have missed this point when traversing Soviet Asia. In the course of writing for the press they have commented upon the lack of amenities of life. They have mistaken apparent poverty of clothing and of diet for true poverty. They have failed to perceive that the deep inner changes, which have shaken age-old traditions and backwardness, have also brought to the surface new forces so that both the land and the people may be improved.

Wherever the people of Soviet Asia have appeared on the battlefront they have given an excellent account of themselves. Berlin has heard of them in action at Moscow. Tokyo still quakes when it thinks of the defeats administered by the Far Eastern Red Army at Changkufeng Hill and at Nomonhan.

It is inevitable that in the struggle to defeat Japan and then to reconstruct Asia on the basis of democratic peace and prosperity the people of Soviet Asia will have an important ideological (and economic) role to perform. Their example may sooner than we think influence the downtrodden and misled people of Japan, whose vital interests

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are, after all, quite at variance with those of the military-imperialist clique that is driving them to destruction.

To those who doubt sincerely and to those who, because of their anti-Soviet bias, attempt to frighten the American public with the bogeyman of growing Soviet strength, we wish to state emphatically that in our opinion Soviet Asia's strength benefits the world. It has been created deliberately for the purpose of protecting a growing nation from the long-expected attack by a foe who twice already, in respect to western powers—at Port Arthur and Pearl Harbor—has shown himself a daring, cunning adversary. So long as powerful Soviet armies stand watch along the borders of Manchukuo and Jehol, so long as Soviet warships and submarines are based in Russian Far Eastern ports, so long as Soviet Asia's airforce remains ready for action, that long must Japan divert a great portion of her armed forces. And this, of course, helps the United States and Canada—in fact, all the United Nations. Whatever happens in Soviet Asia, therefore, is of interest to us. The more tanks and planes and machines the Russian factories produce, the safer will Americans be from Axis threat.

After the victory, which her dauntless fighters at the front and her people behind the lines are sacrificing so much to win, the Soviet Union will play an active and important role in world affairs, and American-Soviet-British friendship, under the terms of the recent pacts, will become a cornerstone of the postwar system of peace and security. In order to construct this friendship on a correct and adequate foundation, it is essential that both Americans and Russians learn a great deal more about each other than they know today.

So let us look at the Russians, our neighbors. Let us look particularly into Soviet Asia, examine its industries,

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and investigate the life of its people. Let us do this that we may learn from them and see how we may help them, remembering that the greater part of their accomplishments are the product of less than twenty years of work. Let us investigate, in order to strengthen, the deepening roots of American-Russian-Canadian collaboration in Asia, the North Pacific, and America.

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2

Cradle of a New World

"WHAT IS SOVIET ASIA LIKE?" A CANADIAN ASKED US.

"It is much like your own country, in vastness of terrain, in climate, in bountiful wheat crops, in forests, in almost inexhaustible reserves of gold, nickel, copper, aluminum," we told him.

To the same question posed by a Mexican friend we truthfully replied that Soviet Asia resembles Mexico in valuable ores, in the variety of climate, in deserts and mountains. To a Mississippi school teacher we explained that Soviet Asia resembles that state in its wide and long navigable rivers and in cotton plantations. Soviet Asia, we said, is like Texas in oil and cattle, like Pennsylvania in coal and shipbuilding, like New Jersey in chemical and war industries, like Ohio in steel plants, like Illinois in packing houses, like Arizona in sand and copper and temperature and health resorts. It is like any and all of our states and Canadian provinces. Its Arctic resembles Alaska and the Yukon and the Northwest Territory. Its south might be California, Florida, Louisiana.

Soviet Asia occupies nearly half of the Asiatic continent, comprising 7,346,548 square miles. This is more than seven-eighths of the total area of the Soviet Union; the equal of the United States, Mexico and Canada (without the Canadian Northwest Territory), thirty-five times larger than Germany, fifty times larger than Japan, and sixty times larger than Italy.

Soviet Asia is strong. In part its power is derived from

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the people, the varied mineral resources, the industrial and agricultural production. But Soviet Asia is strong also because of its geographical position, which places it either in immediate or quite close contact with nine countries on three continents. Because of this geographical position the territory of Soviet Asia has ever been cast into the vortex of world events. Thus it was more than two thousand years ago when Asiatic tribes last invaded America in search of new settlement, and a thousand years later when Genghis Khan led his hordes across Asia into Europe. Thus it is today when Soviet Asia forms one of the major bulwarks of world struggle for democratic survival and development.

In the north Soviet Asia is bounded by the Arctic Ocean; in the south, by the Tian-Shan and Pamir ranges; in the southwest by the highlands of Western China; in the northeast by the Pacific Ocean, and in the west by the Ural mountains, which stretch for two thousand miles from the Kara Sea in the Far North to the lowlands by the Caspian Sea in the south and constitute the continental division of Asia from Europe. Its frontiers touch on Iran, Afghanistan, China, the Tuva and Mongolian People's Republics, Manchukuo and, in the island of Sakhalin, on Japan. From India Soviet Asia is barely separated in places by a nine-mile wide and four-mile high mountainous strip of Afghan territory.

Soil and Climate

From north to south seven distinct belts of soil and vegetation gird the extensive body of Soviet Asia, profoundly influencing the character of its people. These belts are tundra, taiga, forest steppe, steppe, semi-desert, desert and the subtropics. Each belt possesses its characteristic plant

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life and consequently its own type of agricultural products. The belts have their own sharply defined colors, associated with types of vegetation.

In the extreme north of the continent lies the zone of tundra, skirting the Arctic Ocean along the full extent of the north Eurasian coast and reaching inland from a few score miles deep along the White Sea coast to more than a thousand miles in the Chukot Peninsula opposite Alaska. The Arctic tundra occupies more than one-sixth of Soviet Asia. Beneath the surface soil, which thaws in summer to a depth of two to three feet, lies subsoil which is permanently frozen to known depths of eight hundred and ninety feet at Amderma, but averaging considerably less. Perfectly preserved specimens of prehistoric animals, even mammoths, have been found embedded in this soil where they have lain for scores of centuries. In the summertime the tundra is swampy. Rainfall and melted snow collect at the surface but the summer is so short that moisture has insufficient time to penetrate the frozen subsoil. The vegetation consists of mosses, dwarf birches, willows and berry bushes. The overall color is greyish-green. In winter, the solidly frozen tundra is covered by snow from one side of the continent to the other. At one time reindeer and dog sleighs were the only means of winter locomotion. Today crawler trucks and snowmobiles driven by airplane propellers reach even the most distant northern habitation.

South of the tundra is the deep-green taiga. The almost interminable ancient forests of coniferous trees make the taiga the wealthiest timber area in the world. On a trip "down" the Yenisei River, both banks were lined for more than two thousand miles with cedar, spruce and pine trees. In round figures the taiga, occupying more than three-fifths of the territory of Soviet Asia, encompasses about

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four and a half million square miles. It teems with game; fur-trapping is one of the chief occupations of the people.

Still farther south, extending from the lower Urals to the borders of Mongolia, is the yellow-green forest steppe, where stands of trees alternate with open steppe. The steppe, most of which is under cultivation, forms the granary of Soviet Asia. Animal husbandry is also widely practised.

Adjoining the southern boundary of the steppe is the area of semi-deserts characterized by a spotty growth of thin, greenish-gray cereal grasses. Occasionally the soil is so salty that no vegetation can take root. In the spring most such areas become covered with water, forming a series of salt water lakes; in the summer this water evaporates, depositing thick beds of salt crystals.

After this come the reddish and burnished-orange sands and clays of the Central Asian desert belt. At least half of the soil here (330,000 square miles) can be revived by water, and the people inhabiting these desert areas have become skilled in building irrigation canals. Wherever water has been made available, cotton and sugar beets are grown, but the major industry is still mining, particularly of non-ferrous metals—copper, zinc and lead.

Finally, occupying the southernmost regions of Soviet Asia, quite small in comparison with others, is the narrow emerald-green belt of subtropical vegetation. Here cotton is king. But orange groves also are proving successful, and so is sugar cane. Everywhere there are gardens and even forests of fruit trees, fields and plantations of subtropical plants. At the very fringes are the mountain ranges of Tian-Shan and Pamir, in reality the jewel boxes of Soviet Asia, replete with enormous deposits of rare metals and minerals. The Russians say that these mountains, some of

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whose peaks are more than 23,000 feet high, repeat in reverse the belts of vegetation of Soviet Asia. Beginning at the subtropical belt in the foothills and ascending the mountains one passes in turn through mountain vegetation belts resembling the steppe, the taiga forest, and the treeless tundra above which tower craggy summits. The snow-capped mountain peaks in turn resemble the Polar ice cap.

There is probably no other area in the world where climate has influenced history and the economic development of man quite so much as in Soviet Asia. In the past, very few people lived in the Arctic and the sub-Arctic. It was too cold. Few also inhabited the deserts and the semi-deserts of Central Asia, where it was too dry and too hot. These climatic conditions are created by the fact that the warm air of the Indian Ocean is blocked by the Himalayas from penetrating the interior, while the north winds have free access. Along the Arctic Ocean the winters are long and exceedingly cold. Near the Pole of Cold of the Northern Hemisphere at Verkhoyansk, the temperature drops in winter to almost 100 degrees below zero Fahrenheit. On the other hand, even in the Arctic regions temperatures of 90 degrees in the shade are frequently recorded during the brief summer months. Farther south the climate is milder, and in the deserts the thermometer sometimes registers as high as 158 degrees Fahrenheit. No other country possesses an annual range of 250 degrees in temperature within its own borders.

Not until the coming of the Soviet regime were measures instituted to overcome the limitations of nature. "The whole problem is contained in man," the Soviets said. "Once he begins to advance on the desert (and in the Arctic) in an organized, planned, and scientific manner,

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he can change it into a blossoming garden (and useful territory)."*

One of the great peculiarities of Soviet Asia is that practically all of its territory slopes northward toward the Arctic Ocean. Most of the rivers flow north. ("Down the river" is north, "up the river" is south.) Only two rivers of any importance, the Ural and the Emba, run southward into the Caspian Sea. The northward flowing rivers are the Ob, 3200 miles, the Lena 3100 miles, the Yenisei 2950 miles, and the Amur 2800 miles in length. They are navigable for much of their courses. In Central Asia the two 1300-mile-long navigable rivers—Amu Darya and Syr-Darya—flow into Aral Sea. Aral Sea is the world's fourth largest inland body of water and is one of the three great lakes of Soviet Asia. The others are the deepest lake in the world, Lake Baikal, and Lake Balkhash, remarkable for the fact that only one river flows into it and none flows out. By providing routes of communication the rivers and lakes of Soviet Asia have contributed materially to its economic development.

Government and People

In general, Soviet Asia is divided into four quite sharply defined zones. These are the Urals and Western Siberia in the west, Kazakhstan and Central Asia in the south, the Arctic in the north, and the East and Far East. In the following chapters we shall consider these large general areas from the point of view of their contribution to the U.S.S.R. and to the democratic world at large.

In latitude the line of division between these zones follows more or less regularly the southern limits of the taiga and the Arctic Circle, emphasized by the Trans-

* N. N. Baransky, *Physical Geography of the U.S.S.R.*, Moscow, 1938.

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Siberian Railway, whose tracks extend for 4,695 miles from the city of Sverdlovsk, on the ridge of the Urals, to Vladivostok on the Pacific. In longitude, the division is established by the Yenisei River.

Before the Revolution of 1917 Russia in Asia consisted of a number of regions administered by governors appointed by the Czar. Most of the portion along and north of the Trans-Siberian Railway was known as Siberia, a place of exile for revolutionaries and a prison for criminals, and an area of suffering for its native population whom the Czarist regime exploited to the utmost in its quest for furs, gold, and timber. The Czarist regime either did not know how to develop, or was not interested in developing the Asiatic portion of its empire.

Those who controlled Czarist Russia's destinies—the industrialists, merchants, and generals—knew only vaguely that their Asiatic territories gave them the leading position on the European and Asiatic continents. They did not look *at* but rather *through* Russian Asia toward the Pacific and Indian Oceans, where, they believed, lay the most lucrative market for their goods and the most profitable fields of activity for their armies. Russian Asia was merely a colony providing furs, certain forest products, some rare metals and, in later years, a small amount of cotton. For the sale of goods it offered but a limited market, since the downtrodden inhabitants had little money to spend. What development of mineral extraction there was, was controlled by foreign interests.

"Czarism," goes an old Russian proverb, "arrived in Central Asia astride a cannon." This applies to the whole area east of the Urals. The manner in which the Russian military developed the newly conquered lands is well illus-

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trated by the story* of the building of the city of Przhevalsk, now Karakol, in Kirghizia:

When the Russians came, first the walls of the fortress were constructed, then a temporary church was set up with walls of felt, after which the saloonkeepers arrived, bringing with them prefabricated saloons. They built the town's first street,—consisting solely of their places of business.

On taking over a new area Czarist officials invariably organized first the collection of taxes, then the suppression of all manifestations of discontent. The first taxes in Russian Asia were called the "Yasak," collected in furs from every man, woman, and child. Later, gold was added and, in the twentieth century, cash—or in its absence, anything else the tax collectors could lay their hands on. This method of organized robbery—it could be called nothing else, for the people received nothing in return—did not change through the years.

An interesting historical document testifies to this. In the late forties of the seventeenth century, the Yakuts, no longer able to bear the persecution of officialdom, addressed themselves to the Czar in complaint against the Voevoda† Golovin:

"He tortured us," they wrote. "Your serfs and orphans, and our wives he shamed with many tortures, and he had us flogged one hundred and fifty times and more, and he burned us on open fire, and shook us many times, and poured ice water on our heads, and with red-hot pincers pulled the veins and navel, and burned us with fire in our private parts, and broke our ribs, and burnt our backs with candles, and poured smoldering coal and ashes upon our shoulders, and drove spikes under our nails."

* Cited in V. Vitkovich, *Kirghizia* (Moscow, Molodaia Gvardia).
† Military governor.

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The reply came later from the Military Governor of the Yenisei Department (now in the Krasnoyarsk Territory) when he wrote to the discontented Buriats:

"We shall send many men with firearms to your villages. You and your wives and children and the village folk, and not only these, but also the cattle, we shall beat and ruin; your yurts* we shall burn without mercy. No one shall be taken prisoner, nor permitted to be ransomed, and those who shall be taken, shall be hanged and executed unto death."

The situation did not change for the better with the passage of time. In 1904, the Czarist War Minister Kuropatkin threatened the complaining Buriats in these words:

"If, from which may the Lord preserve us, you people have any intention of taking untoward liberties, opposing the word of the Emperor, then you must know that you will be immediately erased from the face of the earth. Not even a trace shall be left of you. You may not demand anything. You may only beg for charity."

Thus cruelty and force characterized the relationship between the rulers of Czarist Russia and the peoples of Russian Asia. Always the conquering armies were followed by traders and tax collectors. The former openly pillaged the natives. The latter practised legalized banditry.

Not only did vodka become a medium of exchange, by means of which natives and Russian colonists alike were endlessly despoiled, but the Czarist regime employed craftier means to perpetuate its despotic rule among the backward peoples. The best land near watercourses was granted to Russian landowners who brought colonists to settle in the land of the Kazakhs and elsewhere in what was called indiscriminately Russian Turkestan. The Russian

* Native skin-covered tent resembling a wigwam.

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was thus favored above the Kazakh, Uzbek, Tadjik, and other native peoples, who violently resented this invasion of their most fruitful soil. In Siberia, which during the more than two centuries of Czarist rule became synonymous with "land of exile," the Russian came generally as a banished person, and even there the ruling authorities found means to keep the convicts and exiles from mingling with the oppressed natives, offering the latter rewards on occasion for the recapture of escaped "criminals." Everything was done to keep the people divided, to exploit them one by one. Nothing was done to unite them and mobilize their resources of intelligence and man power for a progressive development of the country.

Civilization was not to be accorded Czar-ruled Russian Asia. What there was of it dribbled through slowly, hesitatingly, surreptitiously, via the Siberian Trunk Road, the only means of European communication with Siberia until the twentieth century. "This road," said the famous Russian dramatist Anton Chekov, who travelled along its thousands of miles to Sakhalin in the year 1890, "is the longest and it seems the worst road in the entire world. It is hard to travel, very hard; but it becomes all the more difficult when you realize that this rutty strip of earth, this black pock-marked trail is the only artery linking Europe with Siberia. And along this artery, we are told, civilization flows eastward. Impossible mud, water, boggy ruts, detours, tumble-down bridges, wayside inns with bedbugs and vermin, evil smells and abusive language."

In the early years of this century, the Trans-Siberian Railway was completed. The first trains crossed the bridge over the Yenisei in 1900 and soon thereafter operated on regular schedules all the way from the Urals to the Pacific over what still remains the longest single railway line in

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the world. The new road possessed great strategic value; it brought exiles all the faster; it established contact between isolated communities. But it did not change the archaic peasant economy; it did not abolish age-old backwardness.

It was not until the rise of Soviet power that the development of Russian Asia became a matter of cardinal importance to both government and people. It was realized, then, that the backwardness of Soviet Asia would delay the advance of the young Soviet state, and even endanger its very existence. "Backward peoples are beaten," wrote Stalin at the time. "But we do not wish to be beaten. No, we do not! We have fallen behind the leading countries by fifty to one hundred years. We must overcome this gap in ten years. Either we shall accomplish this, or we shall be destroyed." And accomplishment implied a progressive program for *all* of the U.S.S.R., including the regions of Soviet Asia.

Today the old Siberia of prisons, tax collectors, and the exploitation of native populations exists no longer. The Asiatic part of the Russian Soviet Federation Socialist Republic, the largest, most populous and most developed state of the Soviet Union, has become a mainstay of Soviet might—one of the major sources of raw materials, manufactured goods, and weapons for the entire U.S.S.R. Where the Czarist governors once ruled there are now nine flourishing regions, four territories, two autonomous republics and one national region.*

The old Central Asia has also disappeared. Gone is the

* These are: The Regions of Sverdlovsk, Cheliabinsk, Omsk, Novosibirsk, Irkutsk, Chita, Amur, Lower Amur, and Ussurisk; the Altai, Krasnoyarsk, Maritime and Khabarovsk Territories; the Autonomous Soviet Socialist Republics of Yakutia and Buriat-Mongolia; the Jewish Autonomous Region (formerly called Biro-Bidjan).

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archaic social system whereby a few individuals—beys, mullahs, princes—controlled the lands and watercourses dominating the lives of millions by charges for water and enforcing upon them a regime of eternal indebtedness. Gone is the system of multiple taxation by native rulers and the Czar. Gone is the age of illiteracy and ignorance. The Kazakh Soviet Socialist Republic, second largest in area in the U.S.S.R., and the Uzbek, Turkmenian, Tadjik, and Kirghiz Republics—the Soviet Socialist Republics of Central Asia—are the key suppliers of the Soviet Union in copper and zinc, cotton and sugar beets, cattle and horses. The people of Central Asia and Asiatic Russia live in friendly collaboration with the Russians, Ukrainians, Jews, Georgians and all the other nationalities of the Union of Soviet Socialist Republics.

Up to the time of the Nazi invasion, slightly less than a fourth—42,000,000—of the total population of the U.S.S.R. inhabited Soviet Asia, only six per square mile of territory.* The majority of the people are Russians, but in the various republics and regions are to be found the 170 nationalities composing the U.S.S.R. Among these are are more than 5,000,000 each of Kazakhs and Uzbeks, more than 1,000,000 each of Tadjiks, Turkmenians and Kirghizes, more than 900,000 Buriat-Mongols and 400,000 Yakuts. There are many thousands of Jews, Ukrainians, Chinese, Koreans, and others. Some of the peoples, however, are very few in number. Such are the Lazes who number 650, the Kunzals, fewer than 125, and the Bots, of whom there were only 31 a few years ago. In the Soviet Far East alone there are more than eighty distinct national groups.

* In the United States the population is 42 to the square mile; in Japan 400 to the square mile.

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The maintenance of cohesive national life within the Soviet republics of both Asia and Europe, each possessing its own language, national tradition and common soil, is one of the most striking phenomena of the Soviet system. From the very beginning Soviet leaders realized that any inequality among nations within the Union would inevitably militate against the construction of socialism, create discord, and bring about military and political weaknesses susceptible to utilization by hostile powers for the purpose of military aggression, and by the defeated imperialists for the purpose of staging a comeback.

These were the major reasons motivating the decree of freedom and equality of all peoples inhabiting former Czarist Russia issued immediately upon the assumption of power by the Soviets in 1917. In 1922 Stalin reported, "The past five years have unquestionably demonstrated that the attempt to establish a multinational state upon a socialist foundation has fully succeeded." The principle of national equality, proclaiming the U.S.S.R. to be "a voluntary and friendly federation of equal nationalities all enjoying equal rights," was officially reiterated by the Stalin Constitution adopted by the Soviet Union in 1936. The soundness of the policy of equality was not recognized by most of the outside world until 1941 when despite dire predictions of so-called "experts" Hitler failed to find the least degree of support among the Soviet Union's national minorities.

The effect of the policy of equality on people of even the most primitive nationalities is impressive. Take, for instance, the story of the former Chukchee reindeer herdsman, Tyvlianto, who lives on the Chukot peninsula opposite Alaska. Once he knew no other language than his own, a medium of conversation used by less than 15,000 people. In 1926 Tyvlianto who had never seen a railway

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or a motor car, set out on a long trek to Leningrad. Though unable to speak a word of Russian he was going to school in that far-off city, his expenses paid by the government. The steamboat that carried him to Vladivostok was a marvel. What made it run? Nothing pulled it. There was neither dog team nor reindeer. Perhaps, as the shaman witch doctors said, evil spirits were in harness pulling him away from his homeland forever. On the dock at Vladivostok he saw motor cars like strange animals with two icy eyes in front and four legs, each round as the moon. When they growled, people scurried out of their way. After a long, three-month journey, he finally arrived at Leningrad, one of the students at the "Tent of Miracles," the name given by the northern natives to their Institute for the Peoples of the Far North.

Here, like hundreds of other northern nomads, Tyvlianto was educated in science, art, and government. After graduation, he returned to the Chukot peninsula, where he became a national leader of his people, founder of elementary schools, promoter of collectivized reindeer breeding, and of flying schools, where his fellow countrymen have learned the art of piloting airplanes, though many of them still may not have seen a railway train. On December 12, 1938, Tyvlianto was elected member of the Supreme Soviet of the Soviet Union from the Chukchee National Area.

Soviet Asia contains, as we have seen, many Soviet Republics. How are they governed? Each Union Republic possesses its own government consisting of one chamber called the Supreme Soviet, whose members are elected for four years on the basis of proportional representation according to the size of the population. The republican governments deal with matters affecting their own territories;

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that is, with taxation, internal communications, local industries, education, health, police, and so on. The fields of foreign relations, foreign trade, national defense, interrepublican communications are handled by the Central Government of the Union of Soviet Socialist Republics, which according to Article 13 of the Stalin Constitution "is a federal state, formed on the basis of the voluntary association of Soviet Socialist Republics having equal rights." Altogether in the U.S.S.R. there are sixteen Union Republics, six of which are in Soviet Asia.* Each has its own constitution, possesses the right to secede, and is granted the inviolability of its territory, which may not be altered without its consent. Each citizen of a Union Republic is also a citizen of the U.S.S.R. and enjoys the full rights of Soviet citizenship, established by the Constitution of the U.S.S.R., which provides that "the equality of rights of citizens of the U.S.S.R. irrespective of their nationality or race, in all spheres of economic, state, cultural, social, and political life, is an indefeasible law. Any direct or indirect restriction of the rights of, or, conversely, any establishment of direct or indirect privileges for, citizens on account of their race or nationality, as well as any advocacy of racial or national exclusiveness or hatred and contempt, is punishable by law."

Freedom of speech, of the press, and of assembly, including the holding of mass meetings, street processions and demonstrations are also guaranteed. So, too, is the right of citizens to personal ownership of their incomes from work and of their savings, of their dwelling houses and subsidiary household economy, their household furniture and

* Those in Soviet Asia are the Russian Soviet Federative Socialist Republic (the Asiatic territory that embraces all of Northern Asia along and north of the Trans-Siberian Railway), the Kazakh, the Uzbek, the Tadjik, the Turkmen and the Kirghiz Soviet Socialist Republics.

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utensils and articles of personal use and convenience, as well as the right of inheritance of personal property. Work is a duty and a matter of honor for every able-bodied citizen, in accordance with the principles: "He who does not work, neither shall he eat," and "From each according to his ability, to each according to his work."

With regard to religious freedom in the U.S.S.R., President Roosevelt issued a favorable statement in October, 1941, that evoked world-wide comment. Among those who responded was the Most Rev. Benjamin, Metropolitan of the Aleutian Islands and North America for the Russian Orthodox Church, who said:

"The church in the U.S.S.R. is regarded as a private society; all persons of the cloth are simply citizens with no special privileges and no special limitations. While the church itself is not regarded as a legal entity, the Government permits the Russian Orthodox Church to function and permits its head, the Acting Patriarch, to rule it and to have a Holy Synod of Archbishops which meets three times a year; it permits the appointment of a bishop and a secretary (to him) in each episcopate; it permits the bishops of the church districts to meet with one another and with the head of the Church in Moscow.

"But if one looks more deeply into the relations between the Church and the Soviet Government, the following lines of development may be observed. The attitude of the Soviet Government to the Church was at first negative, then merely suspicious, later peaceful, and most recently, or at least so it would appear to me, there is even some recognition of the usefulness of the church. Public statements have been made by members of the Academy of Sciences on the creative and progressive role of early Christianity, and now the Government has given evidence

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of the high value it attaches to the patriotic appeal made by Acting Patriarch Sergei to the entire church in Russia. Therefore, it may already be said that, despite the legal separation of church and state, there is now a factual co-operation between them, a co-operation which has as yet neither been announced nor formalized."*

The co-operation of which Metropolitan Benjamin speaks is evidently not economic support, for the Soviet state does not subsidize any church institution as was the case with the Russian Orthodox Church under the Czars. But there is evidence of Soviet moral approval of church patriotic activity, against the Nazis. This activity was manifest in numerous patriotic appeals made by Acting Patriarch Sergei of Moscow, by the Vilna Rabbinical Council, by the Armenian-Georgian Church, and even by the Moslem leader Rasulev of Central Asia.

This active co-operation with the Soviet state in a period of national emergency no doubt has been facilitated by the new Constitution, which restored to priests, clergymen, mullahs, and all other churchmen the same rights as all other citizens. We recall the long public discussion that preceded the adoption of the Constitution, first presented to the Soviet populace in draft form. In order that the general public might have a clear conception of all its provisions and be able to offer amendments, discussions were held everywhere, even in parks and recreational centers, where the local Soviets erected stands and sent educational workers to answer questions.

One day, while strolling in the Park of Culture and Rest in Moscow, we stopped before one such stand around

* *Russia at War,* Bulletin of the American-Russian Institute, Oct. 9, 1941.

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which a sizable crowd had gathered. One person in the audience fired the question:

"Can a priest stand for election?"

"Yes, he has the right," replied the young Soviet spokesman.

"And what about a mullah?" asked another.

"Yes, even a mullah, a lama, or what you will," was the answer, "providing he be nominated by the voters of an electoral area."

"It doesn't seem right to me," said an ardent young member of the Bezbozhniki (Atheist Society). "They don't produce anything, they're not working people."

"That may be true," replied the spokesman, "but so long as they are not enemies of the people, they enjoy the same rights as every citizen. Of course, the church is separate from the state and is not regarded as a public organization or society of the working people. To be nominated as a candidate the priest, clergyman, or mullah must be an active member of a public organization. And to be such he must engage in productive labor. His church could not nominate him for election to a position of state responsibility. The right to nominate candidates is secured to public organizations and societies of the working people."

"I don't see anything wrong with that," said the first person.

"Well, I'll do my best to see that no priest gets nominated in my electoral area," said the Bezbozhnik, unconvinced.

The provision in the Constitution as finally adopted reads:

"In order to secure to citizens freedom of conscience, the church of the U.S.S.R. is separated from the state, and the school from the church. Freedom of religious worship

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and freedom of anti-religious propaganda is recognized for all citizens."

In the Central Asian republics, the majority of the people are Mohammedans, but there are some Buddhists and even some pagans, all following their choice with respect to worship and the form that worship shall take. Under the Czar all minority religious sects were oppressed or suppressed, including the Protestants. This is no longer true.

The Constitution of the U.S.S.R., which became the fundamental law in December 1936, also provides for the form and power of the governing organs in the Union of Soviet Socialist Republics. The highest state authority is vested in the Supreme Soviet, which consists of two chambers: the *Soviet of the Union,* whose members are elected from electoral areas on the basis of one deputy for every 300,000 of the population, and the *Soviet of Nationalities,* whose members are elected from union and autonomous republics, autonomous regions and national areas on the basis of twenty-five deputies from each union republic, eleven deputies from each autonomous republic, five deputies from each autonomous region, and one deputy from each national area. Thus Soviet Asia, as a whole, has more than 125 deputies in the Soviet of the Union and more than 170 in the Soviet of Nationalities. The citizenry have full representation both on the basis of the general population and of national minorities. All deputies are elected for terms of four years. The people of Soviet Asia send to the two chambers representatives elected on the same basis as are those of European Russia. The electoral system is defined by the Constitution, thus:

"Elections of deputies are universal: all citizens of the U.S.S.R. who have reached the age of eighteen, irrespective of race or nationality, religion, educational and residential

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qualifications, social origin, property status, or past activities, have the right to vote in the election of deputies and to be elected, with the exception of insane persons and persons who have been convicted by a court of law and whose sentences include deprivation of electoral rights."

All citizens participate in elections on an equal footing, which means that women, also, have the right to elect and to be elected on equal terms with the men. Women are, in fact, accorded equal rights with men in all spheres of economic, state, cultural, social, and political life. The possibility of exercising these rights is ensured to women by granting them an equal right with men to work, payment for work, rest and leisure, social insurance and education, and by state protection of the interests of mother and child, prematernity and maternity leave with full pay, and the provision of a wide network of maternity homes, nurseries and kindergartens.

Elections to the Soviets—city, village, district, regional, republican, all-Union—are held whenever feasible at the point of occupation. That is to say, factory workers, collective farmers, soldiers, students, elect their deputies at the place where they engage in work, military duties, or study. Housewives generally vote at the factories, farms, and offices where their husbands are employed. Invalids vote in hospitals. Polls are also held in residential areas. The ballot is secret and direct. Candidates are nominated according to electoral areas, and the right to nominate candidates is secured to public organizations and societies of the working people: Communist Party organizations, trade unions, co-operatives, youth organizations, and cultural societies. Upon election, members of the Soviets, including the Supreme Soviet, as a rule, leave their customary jobs only long enough to attend the regular Sessions of the

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Soviets. The Supreme Soviet normally holds semiannual sessions. At other times most of the deputies, even those of the Supreme Soviet, remain at work in their usual place of employment. Membership in the Supreme Soviet does not mean either abandonment of the member's occupation as mill worker, miner, farmer, aviator, opera singer, or whatever his occupation may be, or the opening of a career in politics apart from the workaday world.

Both chambers of the Supreme Soviet—the Soviet of the Union and the Soviet of Nationalities—have an equal right to initiate legislation, which becomes law when passed by simple majority vote in each chamber. In the event of disagreement between the two chambers, the question is referred for settlement to a conciliation commission formed on a parity basis. Decisions of this commission are subject to review of both chambers. The legislative power of the U.S.S.R. is exercised exclusively by the Supreme Soviet of the U.S.S.R. Between sessions of its two chambers, executive power is vested in the Presidium of the Supreme Soviet, which is elected at a joint sitting of both chambers and consists of a President (now Michael Kalinin), one vice-president for each of the Union Republics, a secretary and twenty-four members. The Presidium is accountable to the Supreme Soviet for all its activities. The Presidium convenes sessions of the Supreme Soviet, interprets laws in operation, issues decrees, dissolves the Supreme Soviet and orders new elections in case of an unresolved disagreement between the two chambers, conducts referendums, annuls decisions and orders of the Council of People's Commissars, appoints and removes higher commands of the armed forces, ratifies international treaties, receives the credentials and letters of recall of diplomatic representatives accredited to it by foreign states, proclaims martial law in separate

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localities or throughout the country, proclaims a state of war in the event of an armed attack on the U.S.S.R., and in the intervals between sessions of the Supreme Soviet relieves of their posts and appoints People's Commissars (subject to approval by the Supreme Soviet). The Supreme Soviet of the U.S.S.R. at a joint sitting of both chambers appoints the Government, namely, the Council of People's Commissars of the U.S.S.R. The chairman of this Council at present is Joseph Stalin, who is also Chairman of the State Committee on Defense and Commissar for Defense of the U.S.S.R.

The Council of People's Commissars, the highest executive and administrative organ, is responsible and accountable to the Supreme Soviet. The jurisdiction of these highest governing organs covers foreign relations, questions of war and peace, the admission of new republics into the U.S.S.R., organization of defense, direction of armed forces, foreign trade on the basis of a state monopoly, establishment of the national economic plans, approval of a single state budget, administration of national economic enterprises, transport, and communication, and other affairs of all-Union importance. Outside of these provisions each union republic exercises state authority independently, much as does each state in the United States. The U.S.S.R. protects the sovereign rights of the union republics, each of which is governed by its own Council of People's Commissars, appointed likewise by its own Supreme Soviet, which in turn is elected in accord with the same electoral law as is in force throughout the Soviet Union, the basis of representation being established by the constitution of the union republic. In this way, the people of Soviet Asia enjoy representative government together with the peoples of European Russia both in their

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own republic and in the union as a whole, their rights thereto being guaranteed by the Constitution of the U.S.S.R., which may be amended only by decision of the Supreme Soviet, by a majority of not less than two-thirds of the votes cast in each of its two chambers.

Only one political party exists in the U.S.S.R. This is the Communist Party of the Soviet Union (Bolsheviks), which acts as the vanguard of the working people in their struggle to strengthen and develop their social system and is the leading core of all organizations of the toiling people, both public and state. Its leadership is vested in a Political Bureau (often called Politbureau) of nine members who at present are: A. Andreyev, L. Kaganovich, M. Kalinin, N. Khrushchev, A. Mikoyan, V. Molotov, J. Stalin, K. Voroshilov, and A. Zhdanov (alternate members: L. Beria, G. Malenkov, A. Shcherbakov, N. Shvernik, and N. Vosnessensky). The Communist Party numbers some two million members, who seek no monopoly of administrative posts. Communists are expected to devote their life to the service of the people. They must move from one end of the country to the other when required and must be ready to do any assigned duty. The requirements for Party membership are extremely high. Communist Party decisions, usually arrived at after protracted periods of thorough debate, are binding upon all members. No wonder Ambassador Davies said that Jim Farley, then "boss" of the American Democratic Party, could learn a great deal from the Russian Communists.

The stated aim of the Communist Party is to lead the U.S.S.R. along the paths of socialist construction to a Communist social system wherein each citizen will give as much of his work as is necessary and will receive in return everything he needs. This system is yet far in the future.

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The Russians themselves are the first to admit this. The present state is a dictatorship of the proletariat.

Where the size of population and economic advance of nationalities has not warranted the formation of self-sufficient union republics, autonomous republics have been established. In Soviet Asia these are the Yakutian, Buriat-Mongolian, and Kara-Kalpakian Republics. The governments of the autonomous republics are similar to those of union republics. Where the territory and the population are small, autonomous regions and national areas are formed. Such are the Jewish Autonomous Region and the Koriak and Chukchee National Areas. The governing body of such regions and areas is the Soviet of Working People's Deputies whose members are elected for two-year terms.

This integration of a system of national autonomy within the framework of republican collaboration on an all-Union scale has facilitated the equalization of economic life. The people of Soviet Asia, especially, needed aid to be able to develop their industries and culture. On the other hand, Soviet Asian industrial and agricultural products were essential to the well-being of the Soviet Union as a whole. Therefore, the Central Soviet Government has been investing many billions of dollars obtained originally from the increment of industrial production, trade and taxation of the more advanced European sections of the U.S.S.R. in the industrial development of Soviet Asia. Technicians, teachers, and engineers have been sent by the thousands to help develop Soviet Asian industries, being especially charged with the training of new men and women who in turn could lead the nationalities of Soviet Asia into modern life. At the same time large-scale immigration into Soviet Asia was encouraged. From 1926

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to 1939 more than three million people migrated from European Russia and the Ukraine to the Urals, Siberia, Central Asia, the Arctic, and the Far East. This process reached tremendous proportions when literally a score of millions moved eastward accompanying factories, schools, and institutions evacuated from the path of Nazi advance in the fall of 1941. On February 7, 1942, the seal of finality was put on this mass migration by a decree of the Council of People's Commissars that effectively closed the gates of the one-way migration by empowering local officials of the vacated regions to take over the old homes of the workers and employees and fill them with their fellows remaining on the spot in national defense industries.*

Although the beginning of the industrial rebirth of Soviet Asia technically dates to the first days following the Revolution, actually it was not until the year 1928, when the First Five Year Plan of Socialist Construction began, that gigantic forward strides were made. When the Plan was first announced, American and other observers either simply dismissed it out of hand as another utopian and idealistic pipe dream, or referred to the scheme as harebrained. The Russians, however, knew what they were doing, mindful as they were of an ever-present threat of war against their state. In industrializing Soviet Asia as part of the industrialization program of the U.S.S.R., their watchword was Lenin's warning that "War is merciless, it poses the problem with merciless clarity; either to perish or to surpass the leading countries . . ." In the years since that warning was sounded enormous achievements have been recorded, but only at the cost of great sacrifices. "We are economizing on everything," Lenin said in 1921, "even

* *New York Times*, Feb. 18, 1942.

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on schools. Why? Because we know that, except by saving heavy industry, except by restoring it, we can not build up industry of any kind. Without it we shall perish altogether as an independent country."* In 1931, Stalin asked, "What are the conditions required for the bringing to life of the possibilities before us?" and gave the reply himself: "In the first place it is necessary that the land have sufficient natural wealth: iron ore, coal, oil, bread, cotton. Have we this wealth? Yes, we have."

The degree of development of these resources is demonstrated by the fact that in 1928 the Urals had 100 small plants; ten years later, in 1938, when the Second Five Year Plan was brought to a close, more than 200 of the largest industrial plants in the world had been erected and were in operation in the Urals.

Success did not come without the most determined struggle. Doubters beset the Soviet Government at every step when the work of industrializing Soviet Asia began. But the greatest resistance came from an insidiously organized fifth column, the work of one of whose groups former United States Ambassador to Moscow, Mr. Joseph E. Davies describes in these words:

"The testimony of many of the minor defendants (at the 1937 trial of the Trotskyite Fifth Column Group) went to establish the fact . . . that they had direct connection with the German and Japanese Intelligence Services and cooperated with them in systematic espionage and sabotage; and either committed or aided and abetted in numerous crimes. For instance, Rataichak (one of the defendants) stated that he had organized and was responsible for two explosions at the Gorlovka nitrogen fertilizer plants which entailed enormous property losses as well as the loss of

* *Collected Works*, Russian edition, vol. XXVII, page 349.

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human life. Pushkin (another defendant) contributed or assumed responsibility for the disaster to the chemical plants of the Voskressensk Chemical Works and the Nevsky plant."*

Overcoming past backwardness, suffering from hostility of the outside world, strugging against fifth columnists, the Soviets in Asia nevertheless have succeeded in advancing in the short period of twenty years from the shadow of an oppressive past to the height of modern technique. People had to build while learning and learn while building. Even while building plants they had never built before, they had to learn to run something they had never seen. It was not possible for Soviet Asia to await the emergence of the modern skilled man before commencing the construction of modern industry. The development of knowledge and economy had to proceed side by side. This process is excellently illustrated by the story of Uku Tavaldyev, a superstitious Kirghiz shepherd who was hired to work on the construction of a Kirghiz highway across the mountains of Tian-Shan.

In the United States such construction would involve simply a given number of workers, so many machines, so much explosive and gravel. But in nomadic Kirghizia it involved far more than that. No less, indeed, than a deep-going revolution in the customs and consciousness of the people.

Uku Tavaldyev's life in the past had been quiet and uneventful; day after day, week after week, year after year, he had led his sheep from pasture to pasture. His whip was his sole friend and companion, a whip which, to be sure, he cracked so often and so expertly that all within

* Joseph E. Davies, *Mission to Moscow*. (New York: Simon and Schuster, 1941.)

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hearing distance used to remark: "Uku Tavaldyev's at the pasture again." Suddenly Uku's life began to be measured by the miles of the new highway.

At the first mile, almost collapsing with fright, Uku lit the fuse leading to the blasting charge and then ran for safety as fast and as far as he could. Two weeks later, at the third mile, he already invited fellow villagers to watch the explosion, and condescendingly laughed at their fears. At the fifth mile, letter by letter he read a small newspaper item about himself. At the tenth mile he read the paper quite fluently and one day amused the engineers by thoughtfully saying: "What do you think of that? The earth looks like the earth, but it turns out to be a globe!" The world began to appear much more complicated to him; his curiosity and his questions began to take in more and more territory; the thirst for knowledge had been awakened.

At the fifteenth mile he understood the principles of blasting; knew something about dynamite and ammonal and passed the examination for the post of blasting foreman. At the twentieth mile, he and his brigade produced the best results, challenging others to competition. When the whole twenty-five miles of road was completed, and the first automobile, greeted by a tremendous crowd, brought a load of supplies to his native village, local bards wrote a song about Uku and sang it at the feast marking the event. It spread throughout the whole republic. In this way fame came to Uku Tavaldyev, and learning and skill.*

* Cited in V. Vitkovitch, *Kirghizia.*

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THE URALS

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3

The Urals—Inner Defense Bastion

THE CHIEF SOURCE OF SOVIET ASIA'S INDUSTRIAL POWER IS the mineral-bearing region of the Ural Mountains.

For more than three centuries the Urals have been the inner bastion of Russian defense. In olden days, they served to protect young Muscovy from aggression from the East. In the eighteenth century, Peter the Great used them as a bastion against invasion from the West, sending Tula gunsmiths to the Urals to aid the former merchant Nikita Demidov in establishing iron and copper works for arms production, which could be operated without interruption should older arsenals near the western frontier fall into the hands of the enemy. Peter understood the importance of this region of his empire far better than did the Czars who followed him, who, together with Russian industrialists, permitted it to decline. Soviet leaders, however, have learned a great deal from Peter the Great and appreciate fully that the Urals are unique in possessing not only the topography for effective defense, but also the strategic minerals for offensive warfare.

Lenin and Stalin and their co-workers, foreseeing the practical certainty of war against the Soviet Union, made the development of Ural industries one of the key points of the whole Soviet program of national reconstruction and socialist building. "The Urals," said Joseph Stalin in 1928, during the debates accompanying the introduction of the First Five Year plan, "represent such a combination of wealth as can not be found in any other country."

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Millions of Russians wore poor clothing, ate simple and often insufficient food, denied their children the better things of life, that the wealth of the Urals might be harnessed and that industrial giants might rise while there was yet time. The Russians realized that unless heavy industries were developed in the Urals and elsewhere, their country would face destruction. It was essential, Soviet leaders never tired of saying, for the preservation of the Soviet regime and Russian freedom to develop new industries at as great a distance as possible from the western frontier. Many lucky, smug, self-satisfied and well-fed Americans jeered at their efforts. We thought that anyone who sacrificed the comforts of life, not to speak of luxuries, for "materialist" (how some of us loved that word) machinery, was off his head. But the whole democratic world, America included, must now admit it was wrong and that the Russians were right. Many hundreds of thousands of American, Canadian, and British lads will owe their lives to the fact that Ural industrial production enables the Russians to produce weapons with which to destroy millions of enemy soldiers and hold the Nazi attack until the United Nations can administer the decisive blow of Nazi defeat.

Persons not familiar with the industrial expansion in the Urals during the past decade have been under the impression that Russia's defense depended almost wholly on the Ukraine industrial areas, and that if the Donets coal fields and the Krivoi Rog iron mines were occupied by the enemy, the industrial potential of Soviet Russia would be essentially knocked out. Actually after the occupation of most of the Ukraine, Russian war industry was able to operate at more than half capacity, with much of the output coming from the Urals. This was even before the

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machinery that was evacuated from the occupied zones could be again set into motion. The Germans got only empty, gutted buildings and desolated, demolished towns. The Russians kept the machines. W. Averill Harriman, head of the American mission to the Moscow Conference in the autumn of 1941, stated on his return to Washington that while the Soviets "need substantial quantities of munitions and raw materials, they have evacuated large numbers of factories—both machinery and workers—from overrun territory to safer places farther east, all in accordance with a prearranged plan." Sir Stafford Cripps, former British Ambassador to Moscow and now Lord Privy Seal and leader of the House of Commons, said in London on February 5, 1942, that by spring "the Russians will have still more fresh armies and all factories they have moved to the east should by then be again in operation."

In evacuating their industries from the Ukraine, the Soviets followed the example of China, where the highly mechanized Japanese Army succeeded in occupying regions along the coast but was unable to conquer the country because Chinese industries and the loyal population had been removed to form strong centers of resistance in the interior. Like the Chinese, the Soviets were able to carry out industrial evacuation, a counterpart of defense in depth, because during the years of the Third Five Year Plan (1937-1942) measures were taken to facilitate this manoeuvre. The Russians, you see, never did "trust to luck," and certainly had no reason to believe that "peace in our time," as invented by Neville Chamberlain, would come to pass. During the First and Second Five Year Plans (1928-1937) large-scale industry was established in the Urals and was already producing to capacity (or what was thought to be capacity) before the war; under the Third Plan, in

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addition to fully equipped plants, factory buildings were erected and were permited to stand empty or partly empty in anticipation of just such an emergency as arose in 1941. By this means the Soviets retained the power to deal the enemy a strategic counterblow, to initiate offensive action following the German rout at Rostov and before the gates of Moscow. This was a new and positive application of the scorched earth policy.

"The evacuation of Ukrainian industry began before the war was four weeks old," wrote *New York Times* correspondent Cyrus L. Sulzberger.* "Plans had long been laid down by the General Staff. Among the factories shuttled eastward lock-stock-and-barrel were: the Dniepropetrovsk steel works, the Zaporozhye aluminum and magnesium plants, the Kiev machinery factories, the Kharkov turbine and electrical equipment plants, the Zaporozhye Harvester Combine factory. Much of the equipment of the Dnieprostroy power station was dismantled and removed before the destruction of the dam. Thousands of Ukrainian tractors were sent East and repaired during the winter for use in development of Siberian farm lands. Scientific institutes were evacuated.

"No foreigner is in a position to state how much of this transferred equipment was successfully put to use again and what the output of the shifted plants now is. An idea of the extent of the movement can only be given by stating that to transport the equipment of one single Dniepropetrovsk plant required 1,400 freight cars, and that 928 pieces of rolling stock were needed to move the apparatus and pupils of the Kharkov trade schools."

During the month following the loss of the Krivoi Rog iron mines in the Ukraine, the production of iron ore in

* *The New York Times Magazine,* May 10, 1942.

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the Urals, particularly at Magnitogorsk, was accelerated fifty per cent. With the loss of the coal mines in the Donets basin, coal mining was intensified in the Kuznetsk basin and in Kazakhstan as well as in the Urals. By July 18, 1941, less than a month after the invasion, the *Moscow News* reported: the output of the Ural mines has already relieved the Trans-Siberian railway of much of the normal coal haul from the Kuznetsk basin, a thousand miles farther east in Western Siberia, thus freeing the rail lines for the movement of troops and supplies to the front.

Sir Stafford Cripps noted in February of this year that the Soviet Union was producing more armaments than it did at the time of the invasion. Almost simultaneously with Cripps's comment, there appeared in the press a report by E. C. Ropes* of the United States Department of Commerce to the effect that: "Particularly valuable developments are reported by the Soviet press in the Ural and Western Siberian districts. To quote one dispatch: 'Ural copper and iron mines, steel mills, and machine shops have pushed their output far above prewar levels. Aluminum, magnesium, zinc, chrome, vanadium, cobalt, wolfram [tungsten], and other strategic metals are pouring in increasing quantities to factories producing ever greater numbers of planes, tanks, guns, and shells. Petroleum regions are pumping thousands of barrels of oil above the prewar norm, and coal mines have more than tripled their former yield.'"

It is easy to understand why the Urals form such a firm foundation for Soviet metallurgy and war production. The reason lies in the variety, quantity and quality of raw material available. The story is told of a Russian boy who

* E. C. Ropes. *Foreign Commercial Weekly*, U. S. Dept. of Commerce, Jan. 31, 1941.

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before a school examination was advised by a friend: "If the teacher asks you where a certain mineral is to be found and you don't know, just point your finger at the Urals. You're bound to be right. There's everything there."

The principal industrial areas of the Urals are the Sverdlovsk and Cheliabinsk Regions of the Russian Soviet Federative Socialist Republic. These two regions have a population of 5,300,000 (1939 census) and encompass most of the Ural mineral-bearing and industrial zone. The mountains stretch northward, however, almost to the Kara Sea through the Omsk Region and southward to the Ural River through the Bashkir Autonomous Soviet Socialist Republic and the Orenburg Region of the R.S.F.S.R. Geographically, part of the Sverdlovsk and Cheliabinsk Regions lies in Europe.

Most of the minerals essential to civilized man, and many that are highly prized for their rarity, are here. Iron is present throughout the length of the mountain ranges. In the Khalilov area are deposits of extraordinary chrome-nickel-iron ores. To the north lie the riches of Magnetic Mountain. To the northwest are the Zigazinsk deposits, and still farther north, the Bakal deposits, known as the richest and purest ore in the Soviet Union. Only one other country, Sweden, possesses ore of similar quality. At Kusinsk titanium-magnetites are mined. In addition to iron, these yield materials for the manufacture of dyes and the rare metal vanadium, needed in the production of high-grade steels. North of the city of Sverdlovsk are the iron deposits of the Tagil-Kushvinsk area. All of the Ural iron ores are located at or close to the surface of the earth, making their extraction easy and inexpensive.

South of Sverdlovsk are rich deposits of copper and

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nickel. The lavishness with which mineral wealth is distributed is indicated by the experience of metallurgists near the station of Blyava, not far from Orsk, where a test hole was drilled in search of iron ore. The ore was found, but the hole was drilled deeper than necessary through an error in calculation. When the drill core was examined, copper was found with a considerable admixture of gold. At Nadezhdinsk, Alapayevsk, and Kamensk there are inexhaustible deposits of bauxite. In the north, mineral salt deposits in quantities second to no other region in the world are being exploited. The Urals are the world's chief producers of platinum, and gold is obtainable almost everywhere, even as nuggets in the gizzards of chickens, in back yards, gardens, in collective farm fields. Deposits supposedly long exhausted are now being reworked with a satisfactory result.

The Ural mountains, the highest peak of which does not rise over 5,600 feet, are covered with thick forests. At one time the forests were used solely for the production of charcoal for blast furnaces and smelters. Today only a few specialized plants operate on charcoal, and the forests are being used more extensively to provide raw material for large paper mills. A great paper plant has been built on the Vishera River, and the Kamsk Paper Mills near Perm are the largest of their kind in the Soviet Union.

In the lower reaches of the Urals, in the Orenburg Region, and in the Bashkir Republic, much wheat and rye is cultivated and animal husbandry is well developed. Moreover, the Bashkirian and Udmurt Republics on the western slopes of the Urals (in Europe) are spoken of as the "second Baku" because of their oil deposits and production.

It is an interesting development of history that the indus-

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tries of the Urals are helping the United States and other democracies. This collaboration is what the numerous Americans who helped build these industries in the initial years of the Five Year Plans hoped for. We knew many of them.

"I am helping industrialize peasant Russia," remarked Bill, a mining engineer, as he led us in 1933 through an asbestos works located 150 miles east of Sverdlovsk. We wondered how a plant apparently lost in the wilderness and reached by riding a boxcar over a one-track railway spur out through dense, boggy forests of spruce could do much to industrialize Russia. But our young friend knew what he was doing and was happily at work, living there with his young bride, the only Americans in town. Output had been ordered increased one hundredfold, for asbestos was a necessary fireproof material for new heating systems. Bill realized that, by raising asbestos production to the level of consumption required by the new Soviet industries he was taking part in a Grand Plan. Many of the workers had been asbestos miners all their lives. Bill was helping them to operate a mechanized mine and mill.

"There's an emerald mine nine miles out of town," Bill remarked as we were leaving. "If you care to stay over, I'll show you around."

But the daily boxcar was pulling out and we were forced to depart, lest we miss connection with the Trans-Siberian local back to Sverdlovsk.

On returning to Sverdlovsk, we were told that twelve miles out of the city was a gold mine, at one time chief claim to fame of the city of Ekaterinburg, known today as Sverdlovsk. We reached this gold field over a new motor road likewise cut through the wilderness of forest. The field itself was on swampy ground and the big problem

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was to introduce mechanized gold mining by the use of dredging machines as in Colorado. Gold production was beginning to be stepped up then to get foreign currency for the purchase of machinery, and although at first some countries would not accept "Moscow gold," it was eventually found to be as good as any other. At this gold mine we met Gustav, a naturalized American of Swedish descent, who, like Bill, was helping Soviet engineers. Incidentally, both he and Bill, as well as other Americans working in Russia, were being well paid, with a part of their salary deposited to their accounts in New York.

"They don't operate the dredge right," grumbled Gustav. "Too much gold dust is thrown out with the dirt. Why, some of these miners here spend all their free time panning the waste dirt. They pan out plenty."

"One would think they were trying to prove that they can mine better in the old-fashioned way," we remarked.

"Some of the old sourdoughs think so," Gustav replied. "But most of them just want a few extra grams of gold to spend at the Torgsin.* But I guess it all goes to the same end, helping buy machinery."

Other American mining engineers were likewise assisting in the modernization of the Soviet gold industry and its establishment in new gold-bearing zones. Among them was the well-known John Littlepage, whose book, *In Search of Soviet Gold,* tells the story of the rise of the Soviet Gold Trust. Not only were old mines like the one we visited near Sverdlovsk being mechanized, but machinery of latest design was being imported and placed into use in gold fields all the way from the Urals to the Pacific. Russia made good use of her gold, purchasing with it machines

* Trading stores accepting only gold or gold-backed currency, established at the time to build up the Soviets' gold and foreign-currency reserves.

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for the new factories, mines, and railways. A large amount of gold was put away against emergency.

From the gold mine we went to the Cheliabinsk Tractor Plant, which was then under construction. Here again we found ample evidence of American aid. The plant had been designed in Detroit, where machine tools were purchased and engineers engaged to assist in construction. Within a few years' time there was erected a caterpillar tractor plant with a production capacity of 70,000 units a year, the largest in the world. The plant consumes 500,000 tons of metal annually and is now producing tanks and armored cars for the Red Army. In addition to the tractor plant, Cheliabinsk has an even larger machine tool plant, a paint factory, and a zinc refinery.

Our trip was like a jaunt through Creation.

From Cheliabinsk we went to the Magnitogorsk Steel Mill, also under construction. We rode up to this new site near the western frontier of Kazakhstan, over a railway spur, since extended to Akhmolinsk for Karaganda coal to feed the giant blast furnaces. Truly these were "Magnetic Mountains." Even nomad tribesmen were drawn to them. We saw tents of nomad Kazakhs pitched on the vast steppe reaching eastward to the horizon, where the sun "came up" out of Soviet Asia and China. Russians, Ukrainians, Jews, Finns, Tatars—all were moving to help build Magnitogorsk. "Go to Magnitogorsk, young man" was the slogan of the time. To the west lay the central forested ridges of the Urals. At the sprawling new settlement, soon to be a city of 200,000, but then still reminiscent of American gold rush "mushroom towns," we also found American engineers. They were full of complaints! Living conditions were bad; sanitation was poor; workers were untrained; it

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was almost impossible to get order out of chaos. But *the plant* . . . ah, that was different!

"It will be the biggest blast furnace in the country," one American enthusiastically told us, "the biggest I've worked on, and I've seen many of them in my twenty-five years of experience. Only I don't think it need have been so darn big. It might prove too difficult to operate, since most of these people know nothing about big steel mills."

There was no doubt of that. Most of the workers were either inexperienced youngsters, full of zeal for the building of their new world, or farmers just off the land. It looked quite hopeless, and we could hardly blame the Americans for feeling despondent about training this raw material. But they learned and learned quickly. Now they operate the plants, while the Americans have long since gone home, still wondering about those incredible Russians.

Magnitogorsk stands as a symbol of the bold and enterprising construction of the period and as a monument to Soviet faith in man. It is a weapon, a many-edged weapon, against backwardness, against ignorance, against native and foreign foes. Hitler paid respect to this monument when he was forced to admit that he underestimated Soviet industrial resources. The fifth columnists in the Soviet Union resisted long and bitterly the building of the Magnitogorsk plant. They claimed, at first, that there was no metal in the Magnetic Mountain. When this was disproved, they insisted that the ore was poor in quality. Then they maintained that the plant would prove too expensive to run; that under winter conditions, sometimes reaching 40 degrees below zero, metal could not be smelted, that blast furnaces would deteriorate. One by one these

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arguments were liquidated, and one by one so were the fifth columnists.

Since 1936 Magnitogorsk produces the cheapest pig iron in the Soviet Union.

Soviet planners no longer design huge plants, boasting that they are the biggest in the world. "Gigantomania" has been condemned and proscribed as a sickness of infantilism. The plants are being designed to suit the needs and resources of their regions. Harmonious proportion is aimed at. If a region has immense resources and adequate communications, huge plants are still built. Where resources are less ample, smaller plants have been found suitable. It is a definite policy to make regions semi-independent economically, relying on local resources. Most of the construction provided for in the Third Year Plan was of small and medium-sized plants, employing between 200 and 400 workers.

In the Urals, before Russian tractors began to roll off the conveyors, the farmers were already organizing machine-tractor stations, which were staffed with imported tractors. One day in Sverdlovsk we went out with a group of Americans to visit such a machine-tractor station. Several of the machines, most of which were American, were idle simply because certain essential parts were unobtainable. This problem was solved as soon as the tractor plants began to produce. The importing of foreign tractors was discontinued after 1932, but in the preceding three or four years the Russians spent $185,000,000 to import 53,000 tractors and 3,600 combines.

Maurice Hindus recently described the early tractor period as follows:* "When the Russians first put tractors

* At Town Hall, New York, January 28, 1942.

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on the land, it was pathetic to see the young people wrecking them by not knowing how to handle them, so many of which had been bought from the United States with the butter and fish and meat and wine and wheat and many other things that they should have eaten, and leather out of which they should have made shoes for themselves, and textiles out of which they should have made clothes for themselves—these they sent abroad and sold, no matter at how low price, to get $60,000,000 to pay for the building of the dam over the Dnieper River and for the tractors they needed. In Russia, at that time, the way to run a tractor was to open her up and let her go as far as possible. Travelling through one region I saw broken tractors in the fields looking like tombstones in a cemetery. It was pitiful! I knew so well the sacrifices that had been made to get them! Finally, there came a time when the Russian people could operate tractors intelligently. By buying tens of thousands of tractors and by putting the young people of the villages and farms on them and giving them the chance even to smash them, by teaching them how to operate tractors correctly, the Russians, within five years, made that young generation tractor-minded, engine-minded, mechanically-minded. If you can run a tractor, you can run a tank. If you understand an engine, you can easily be taught how to operate an anti-tank gun. Today ten million Russians are facing the most highly mechanized army in history, an army that has at its disposal every possible gadget coming out of a laboratory. If Russia had not driven her people through collectivization of the land and had not smashed thousands of tractors, at a terrific cost, Russia would not have had these millions of men who understand mechanical things and who can fight!"

"In 1931," referring to the construction of factories,

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Hindus went on to say, "there was a convention of factory managers from all over Russia. Many of the managers who came to that mass meeting were dissatisfied. 'We have got to stop,' they cried, 'this is exhausting us! The workers have not enough strength to go on, they have not enough food to eat. We will *have* to slow down a bit.' They expected Stalin to say that he would stop driving the country to exhaustion in the building of industries. Do you know what Stalin said? He said, 'Russia is about one hundred years behind industrially. Either we catch up in the next ten years or we are crushed. Therefore, we will not slacken our pace!' Ten years and two months later the mightiest land army in the world attacked Russia. In the light of this attack, I now ask myself, 'Suppose they had slackened their pace in the steel shops, in the tractor factories, in the gun factories? *Suppose they had?* Suppose that in five years the youth of the villages had not become machine-minded. Where would they be now? *Where would we be?*"

The Russians solved the problem of spare parts for tractors twelve years ago by building the tractor plant, but what would happen, many then asked themselves, when essential parts of a giant steel mill like the one at Magnitogorsk broke down or wore out?

We found the answer at the Ural Machine Building Works. This enormous plant, occupying hundreds of acres on the outskirts of Sverdlovsk, and employing 20,000 workers, houses the machinery for building machines. Here equipment for steel and metallurgical plants is manufactured. Similar plants exist to manufacture tools for tractor plants, gold-excavating machinery plants, even for the Machine Building Works itself. These plants are now engaged in direct armament production and in the manufacture of machine tools for war plants.

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In addition to the plants mentioned, there are many other kinds in the Urals. One of the largest locomotive works in the Soviet Union is located at Orsk. The largest railway carbuilding works in the world is at Nizhnii-Tagil, which also has a large steel mill, a heavy bridge-building works, and a pipe plant. There are precision instrument factories at Zlatoust, Cheliabinsk, and Sverdlovsk. One of the largest Soviet chemical plants is at Berezniki, producing nitrates and explosives. A new nickel smelting plant is located at Upper Ufalei near Cheliabinsk. The Ushimbaev oil field, as early as 1936, produced one million tons of petroleum. At Solikamsk, magnesium is made for use in airplanes. At Krasnovishersk is a large plant making cellulose for explosives. In Uzhevsk is a big hunting rifle and motorcycle plant, in addition to machine building works. In Belozersky is a plant manufacturing barbed wire. There are scores of other plants of equal significance throughout the Urals. "Somewhere" in the Urals is the famous Kirov Tank Building Works evacuated from Leningrad and producing tanks on the conveyor system.

The Urals are expanding the production of wheat. In 1940, 500,000 acres of virgin land were put under the plow. Further expansion is under way to free this industrial region from the need to import grain from European Russia.

But a country must not be judged by technical progress alone. It would be empty attainment, indeed, that did not repay the sacrifice of thousands of individuals for the realization of the "Ural dream." And signs were not lacking even in the beginning of the Five Year Plans that Soviet planning was on a larger scale than industrialization alone. Apart from the great technical college at Sverdlovsk for

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training engineers and technicians, there are scores of institutions designed for the people's social welfare. The Sverdlovsk Medical Center is an immense institution with several hospitals for various types of treatment. One section was engaged in psychotechnical studies of the incidence of industrial accidents among mill operators, electric cranemen, locomotive engineers, press operators, and employees engaged in other jobs in the metallurgical industry.

The psychological research workers themselves made job studies by working in the mills, examining the causes of accidents on the spot, and learning how to prevent them, a very important task among the raw, inexperienced workers coming from the countryside into factories. Motion picture studies were made of work operations, which proved so effective that they served not only in teaching new men how to avoid accidents but proved useful in devising aptitude tests by means of which workmen could be selected for specific employment. This institute is affiliated with a national organization in Moscow and has branches of its own in most of the important Ural industrial centers.

Scientific work becomes more than usually significant when viewed against the background of a state that has financed the entire medical center, of which this institute is but a section, out of social welfare funds administered by the trade unions. Medical services for workers in the Ural industries are free. Annual vacations with full pay are guaranteed. Special diets are given to men employed in the so-called hot-shops, forge rooms and foundries. Of course, under the conditions of war many of the privileges enjoyed by Ural and all Soviet Asian workers are being foregone and will be foregone as long as the war lasts.

Another feature of construction in the Urals that im-

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pressed us was the emphasis placed on municipal construction and the development of sport facilities in and near the cities. The building of new cities and the expansion of the old ones was accomplished mainly by the construction not only of large, attractive apartment houses but of comfortable cottages amid spruce and birch trees in a countryside dotted with lakes. Because the large-scale construction of houses was a new development in all of Soviet Asia, and because sufficient skilled labor was lacking, many of the new residences soon showed serious defects. Even so, they were and are a distinct improvement over the past. Houses built during the past three or four years are of higher quality and better design.

In the Urals winter, which is both long and cold, ice skating and skiing are very popular sports. It was thrilling to see thousands of Russians—young and old—assemble at the rinks and ski jumps. Everyone seemed to be a sportsman. (This is paying great dividends in the war.) In the city of Sverdlovsk, for example, there is a large lagoon flanked by low hills. A sports stadium has been erected by the lakeside where boating is enjoyed during the summer. In winter, from the end of November to March, when the lagoon is solid ice, skiers swoop down the hillsides far out across the frozen water. Part of the surface is an ice-skating rink, which is kept free of snow, and here, to the strains of orchestral or radio music, couples swing around in the sub-zero weather with as much verve as the young people in the Adirondacks or in the winter playgrounds of Canada.

Sverdlovsk has several motion-picture houses, a dramatic theatre recently finished, with its own company (the first the city has ever had), an opera house, which prior to the Revolution, was the only theatrical building in town and

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a mark of distinction, showing that Ekaterinburg was one of the wealthier cities of Czarist Russia, like Odessa. Famous for its gold and copper mines, Ekaterinburg had a population of only about 25,000, and though it had an opera house, it lacked a sewage disposal system, running water, or street cars. For all of its ostentatious display it was a small provincial town. Today Sverdlovsk has a municipal street car system, ten years old, has running water in every apartment, a sewerage system, and electric lighting. It has become one of the Soviet Union's largest transportation centers, a junction of seven railways, an important air terminal with an airport, one of the best equipped in Russia, recently established on the outskirts of this reborn and rebuilt city of 450,000 people. It is nearly the same story at Nizhnii-Tagil.

Most of these now large and bustling cities were originally parts of the estates of Ural mine proprietors. During the eighteenth and nineteenth centuries serfs worked the iron, copper, gold, and platinum mines. Gold was discovered in the Ural province of Perm as early as 1745, and history records that the discovery of precious metals on the estates of the large landlords, already among the wealthiest men in the Czarist Empire, gave "an European celebrity to the names of Yakovlev and Demidov." Verkh-Issetsk and Verknii-Tagil, in the Perm region, belonged to the Yakovlev family and extended over more than 3,000,000 acres, with a population, in 1834, of 11,000 serfs. Iron, copper, and gold were produced by artisan methods.

Nizhnii-Tagil, which belonged to the Demidovs from 1725 on, was said to be a "still more magnificent possession." Beside iron and copper, gold and platinum were mined. The estate comprised more than 4,000,000 acres, and its population in 1834 numbered 20,000 serfs. The

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Demidovs were praised for their skill and zeal in carrying the "civilization of Europe to the wilds of the Urals." The Palace of the Demidovs had a collection of paintings by the first Italian masters, but was seldom if ever inhabited by its proprietors, who preferred Florence and Paris to the Urals.

The founder of the Demidov family was, according to some authorities, an "eminent gunsmith of the town of Tula, whose abilities gained him the favor of Peter the Great, and the gift of the mines on which the colossal fortune of his descendants was raised." Almost all of the early mining and smelting in the Urals and Siberia is associated with the name of Demidov, the gunsmith who became one of Czarist Russia's greatest landowners. Within one hundred years of the founding of the Ural industries, their owner Anatolii Demidov was receiving from them more than 2,000,000 rubles in gold a year, a very considerable sum for that time. Demidov's heirs became nobles, then dukes; one of them married a niece of Napoleon I.*

Such large estates of the landlord aristocracy in Russia have long since been liquidated. Sverdlovsk, as a matter of fact, proved to be the place midway between Europe and Asia where the last of the Romanoff czars met his doom following the crushing and sweeping away of autocracy in the Russian Revolution. The site of the execution, that is, the building itself, is today a museum, but more honored in the hearts of the people is the Ploshchad Kommuni (Square of the Commune), where the new medical center stands and where, during the civil war and intervention, several members of the local city Soviet were put to death by the counterrevolutionary forces inspired with the dream of restoring what the people and history had rejected and

* I. Freidin, *Land of the Soviets* (Moscow, 1937).

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overthrown as an outworn, intolerable system of government and society.

An industrial age in wartime has an insatiable hunger for metals, which go into tanks, artillery, wires, instruments, airplanes. A few hundred tons of copper annually might have been a big output, sufficient to give "an European celebrity" to the names of Demidov and Yakovlev, especially since they were used to make samovars, copper coins, and cannon, but today the Soviet Union finds that a few hundred tons of copper is a mere trifle. Much has been done to increase the output, which is now second only to that of the United States. More might have been done, but there were difficulties in obtaining machinery from abroad. Ultimately machines were bought, sufficient for a portion of the construction planned by the Soviet.

We saw a great copper plant go up in the town of Revka, 25 miles from Sverdlovsk, a plant where copper is smelted by the electrolytic process, which also permits the recovery of residual gold and silver.

The plant in Revka, known as the Central Urals Copper Smelting Combinat, holds in the non-ferrous metals industry a place comparable to that which the Magnitogorsk works holds in iron and steel. This one plant alone, and there are others in the Urals and elsewhere in Soviet Asia, has a capacity one and a half times greater than the entire output of copper in Russia in 1913 (31,000 tons). The Ural copper deposits produce 60 per cent of the copper output; but the largest deposits lie in Kazakhstan, where giant smelters capable of an annual output of 100,000 tons are now in operation.

The wealth of the Urals is undenied. Industrialization, here, has been carried through on a vast, imaginative scale and has served well the purposes of national defense. Still

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the country cries for copper, as it does for steel and iron and lead and zinc. Metal, more metal, is needed for tanks, for guns, for tractors, for railway equipment, for laboratories, for telescopes . . . but no longer for samovars and copper coins. Copper kettles and samovars have become the symbols of a more leisurely age than the one in which we live. To meet the need, industries have been built in other parts of Soviet Asia of such prospective magnitude that even those of the Urals may eventually appear small by comparison. Of these industries we will tell as we step from the threshold of the Urals down into the vast country of the interior of Soviet Asia.

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4

Western Siberia—Soviet Asia's Middle West

AT THE FOOT OF THE URALS, STRETCHING EASTWARD PART way to the Pacific, lies Western Siberia, Soviet Asia's "Middle West." It is Russia's hidden arsenal. It is the least vulnerable to invasion and aerial attack of all areas in the U.S.S.R. Far removed from the battlefront, its industries constitute the base for the defense of the eastern and southern frontiers of the Soviets in Asia. They also buttress the Urals as a source of weapons and materials for Soviet armies in Europe. Invaders from any direction would first have to occupy all of European Russia, the Urals, Eastern Siberia, and Kazakhstan before they could enter this hidden arsenal. Even then they would find that Western Siberia had sufficient internal resources to maintain war industries, feed the population and go on fighting.

Machinery made in the gigantic new plants constructed during the past ten or twelve years supplies the farms and manufacturing industries of practically the whole of Soviet Asia. In addition, the steel mills of Western Siberia, particularly those of the Kuznetzk basin, are frequently called upon to satisfy some special need of the Soviets in Europe. The rails for Moscow's subway system were made in Western Siberia.

Western Siberia lies within the Russian Republic and is a geographical rather than a political entity. It stretches from the Urals in the west to the Yenisei River in the east and from the Arctic Ocean in the north to the frontier of the Kazakh Republic in the south. It contains, from

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WESTERN SIBERIA

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west to east, the Omsk Region, the Novosibirsk Region, the Krasnoyarsk Territory, and the Altai Territory, each larger in area than almost any one of our largest states. Together they are comparable in size to the entire Middle West of the United States between the Appalachians and the Rocky Mountains.

Transportation in Western Siberia is, generally, via the Trans-Siberian Railway from west to east, and from north to south by steamboats plying the Ob and Yenisei River systems. A sea voyage from Archangel or Murmansk to the Kara Sea brings one to the mouths of the Ob and the Yenisei, whence river steamboats continue the journey up the Ob River system to the Altai and Western China, or up the Yenisei to the borders of Mongolia almost into the heart of Asia. The voyage up the Yenisei to Krasnoyarsk or up the Ob to Novosibirsk is much like a steamboat trip along the Mississippi from New Orleans to St. Louis or Kansas City. The rail journey eastward from the Urals to the Yenisei is like a journey from Pittsburgh to Denver. The Trans-Siberian Railway crosses the Ob River at Novosibirsk and the Yenisei River at Krasnoyarsk.

American travellers have often compared the rising city of Novosibirsk, the population of which increased from 114,000 in 1926 to 310,000 in 1939, to Chicago at its beginning. Steel mills and coal mines of the Kuznetsk basin are comparable to those of Pittsburgh or Youngstown. The farmlands are like those of Kansas and Iowa. The population was 11,000,000 before Germany attacked Russia. It is much greater now.

We last crossed Western Siberia in April, 1940. It was as though a moving panorama revolved from a focal point somewhere in the distance, unseen and motionless. The plains were sparkling white, snow-covered, to the horizon.

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Here and there log cabins flashed by with carved window frames and gables, typical peasant homes; occasionally machine-tractor stations could be seen, and a telegraph line running off along a prairie road to some farming community. We passed long trains of coal cars—Kuznetsk coal it was, going west to Magnitogorsk. Traffic is heavy on this line. Beside the tracks stand huge grain elevators, recently built.

At Omsk, capital of the Omsk Region, we crossed the Irtysh River, a tributary of the Ob and the first river reached by the Russians in the early conquest of Siberia.

Next we arrived (travelling toward the Pacific) at Novosibirsk, the capital of the region of the same name. We left the car for a few minutes to stretch our legs. Behind the debris of what had been the old railway station, then being razed, a new station was going up, a long six-story building. There was no time to stop and explore the high-vaulted waiting room, or visit the ticket office where reservations could be made for trains bound to Stalinsk, Tomsk, or Alma-Ata and Tashkent. After a short stop, the train rolled on, passing over one of two bridges spanning the broad Ob River. The next day we rode into Krasnoyarsk on the Yenisei, four days and more than 2500 miles from Moscow. To reach Vladivostok we would have to travel another five days.

On a previous visit we had gone by water from Krasnoyarsk to Igarka in the far north of the Territory. When our steamboat left Krasnoyarsk for the six-day trip down the Yenisei, it had on board the leaders of the political and economic life of Krasnoyarsk Territory, among them the secretary of the Krasnoyarsk Territorial Committee of the Communist Party of the Soviet Union. Twenty years ago men like these went down the Yenisei only on

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"one-way trips," into exile. The Party secretary, a former cooper, went ashore at every settlement we touched to discuss problems with the local inhabitants. And while the steamboat was in motion he did not sit idly on the Captain's bridge admiring the forests, but spent his time among the people on board, talking over difficulties with passengers and crew. One day he invited the chairmen of fishing artels, nomadic Soviets, and collective farms to assemble in the ship's ward room.

"What do your people need to improve their life?" he asked Ivan Tiganov, a 25-year-old Ketu, chairman of a nomadic Soviet, the governing body of forty households of nomad Ketus. The wandering Ketus spend most of their summers fishing in the river, and their winters trapping fur-bearing animals in the forests.

"We need to develop a settled life," replied Tiganov.

"Where?" asked the Party secretary.

"At Solomai." (A village on the Yenisei.)

"Why there?" asked the leader.

"Because at Solomai there is a store where we can buy all we need," replied the nomad.

"Do your people really want to settle, or is there just talk about settling?"

"The people would like to settle. It is hard on the children when we wander from place to place. Three of the seven children born among us last year died."

"Can't you apply to the Solomai Soviet for permission to occupy land near the village? There is plenty of vacant land. Why don't you just occupy it?" asked the Party leader.

"We don't know how to settle. We can't build houses."

"You should build isbas (peasant huts). Timber is plentiful. You just need to chop it down."

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"We need help in building houses. We have to learn how they are made," replied Tiganov.

The Party secretary immediately found out from one of his experts how much a standard house would cost, and learned that there was a carpenter in Solomai who might assist the nomads to erect a settlement. "If your people really want to settle, we shall make it possible for them to do so," he concluded, and in this direct manner the "business" was arranged.

The Krasnoyarsk Territory and the Novosibirsk Region possess immense natural resources, chiefly in coal, timber, iron, polymetallic ores, and water power. Industrial development in the Krasnoyarsk Territory between 1928 and 1937 absorbed an investment of $475,000,000. Among the numerous plants established was the Northern Polymetallic Combinat at Norilsk within the Arctic Circle, the output of which has made it possible to double the Soviet Union's production of such metals as molybdenum, mercury, and zinc. Copper and nickel are also refined at this new plant. The town of Norilsk, with 30,000 inhabitants, to this date has no direct rail connections with the outside world, but in recent years a 90-mile railroad was laid across the tundra to the port of Dudinka on the Yenisei, where Norilsk metals are transferred to river steamboats for a trip up the Yenisei south to the railway line at Krasnoyarsk, or down the Yenisei to the Arctic Ocean and then to Archangel or Murmansk.

Norilsk today has a larger population than had Krasnoyarsk in 1900 when the Trans-Siberian Railway was opened. During the subsequent 25 years the population of Krasnoyarsk tripled, reaching 72,100 persons in 1926. The next ten years brought an additional 80,000 people to work

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in the industries, so that by 1936 the city had 150,000 inhabitants. The enthusiastic pioneers of Norilsk are seriously thinking of challenging Krasnoyarsk to a competition in the size of population, for, they say, if Krasnoyarsk, during the 35 years from 1900 to 1936, increased its population sixfold, what will Norilsk be like as many years hence. But the city of Krasnoyarsk is not content with its present size. New mills and factories are constantly rising within it. Recently a new paper-cellulose plant has been built, the railway shops have been enlarged, a plant manufacturing gold-dredging equipment has been set into motion.

The Novosibirsk Region, to westward, has seen even more remarkable industrial developments. The total commercial output of this region, which includes the mining and smelting enterprises of the Kuznetzk basin, has risen from $33,000,000 in 1912, mostly in farm products, to $533,000,000 in 1937, the bulk in industrial products. During the latter year the newly built electric power stations of the region had a capacity of 275,000 kilowatts. The Kuznetzk coal deposit, some of it in 30-foot seams, is estimated to total about 450,000,000,000 tons. Carved by the developing Tom River system millenniums ago, it was formed in connection with mountain ridges that rose around its edges in the Lower Paleozoic epoch. As the ridges rose, the area sank to form a basin. At the beginning of the Devonian period both the Kuznetzk-Alatau and the Salair mountain ranges here were islands and peninsulas in the immense Uralo-Siberian Sea. Volcanic eruptions occurred on the edges of this sea. Gradually the Kuznetzk basin separated from the open sea, becoming a lake on whose shores grew marsh forests of tree ferns and

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other large plants—the materials for the formation of today's thirty-foot coal seams.

The deposits of the adjacent Krasnoyarsk Territory, only twelve per cent of which has been explored, include 154 separate coal beds, containing an estimated 670,000,000,000 tons, most of which still awaits further industrial expansion and the development of transportation for its exploitation. The coal deposits of Western Siberia comprise 43 per cent of the total known coal deposits in the Soviet Union. The Kuznetzk basin today produces 20,000,000 tons of coal a year.* Moreover, there are rich iron deposits. Those situated within one hundred miles or so of the Kuznetzk coal are alone estimated at 500,000,000 tons. This is the geological basis that enabled the Kuznetzk mills as early as 1936 to produce more pig iron than Poland, Sweden, and Austria, and in 1937 to produce twice as much metal as Italy. The Stalin Metallurgical Combinat, standing not far from the old town of Kuznetzk, where the Russian writer Feodor Dostoyevsky spent a period of exile, alone produces more than 1,700,000 tons of pig iron and 2,100,000 tons of steel per year, more than Canada produced before this war, and half as much as Japan produces today.

On the train, industrial developments naturally formed the main topic of conversation. The Russian "Middle Westerners" are as great boosters of their towns and local industries as are the members of the Chambers of Commerce of the towns in the American Middle West. Every one of our fellow travellers, each of whom was taking some active part in promoting his country's growth, was ready to talk at any time and for any length of time about his own particular undertaking. It was an enthusiastic

* George B. Cressey, interview with the *United Press*, March 13, 1942.

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as well as an enthusing and convincing boastfulness. Some of the passengers on the train were young people who had signed up in Moscow for work with the Kamchatka Development Company and were en route to man the radio stations there. Other passengers looked quite ordinary and uninteresting. One such was a man simply dressed in a dark Russian blouse. Nothing about him suggested anything out of the ordinary; he might have been a day laborer or a railway guard. But he was neither.

He had just been to Moscow to attend a conference of business managers, followed by a reception at the Kremlin. He was on his way to Stalinsk, in the Kuznetzk basin. He held the post of chief manager of all food stores in this new city of 220,000, a community the size of Syracuse, N. Y. He was a member of the Communist Party, and during the discussion with us he spoke with feeling and gratitude of the Red Army. He told how as an ignorant young peasant he had joined the Red Army during the Civil War. While attending a Red Army School he had learned to read and write, obtaining his first glimpse of the world of science and literature. When speaking of *his* Stalinsk, he quoted lines of poetry. As we listened we smiled involuntarily, imagining a municipal chain-store manager in the U.S.A. describing his work and his stores in excellent verse. To this man poetry was something real, something new, a product of the life of which he was part. He quoted Vladimir Mayakovsky, whom Stalin once called "the greatest poet of our Soviet epoch," and who, when Stalinsk was still but a glint in some Soviet planner's eye, wrote:

"In four years' time
This glade of boggy soil
Will be a garden city.

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"With open hearts
Of a hundred sun-power
We shall light up Siberia."

"I helped to build that city in the wilderness," he said, glowing with pride. "Now blast furnaces sparkle as sun-rays on the midnight sky."

The Kuznetzk iron and steel center was created with no industry at all as a foundation. In the Urals and the Ukraine there had at least been small plants with which to start. The city of Stalinsk was, in 1917, the village of Kuznetzk with 3,000 inhabitants. By 1939 it had expanded to a population of 220,000. Together with other new and prospering industrial towns, including Prokopievsk, Kiselevsk, Leninsk, the Kuznetzk basin area in 1939 had a total population of 800,000.* Today the population is considerably more than a million, having been augmented by workers in industries transplanted from the Ukraine.

The Kuznetzk mills were begun about twelve years ago. The plan involved the linking of Kuznetzk coal with the Magnitogorsk iron deposits in what was known as the Uralo-Kuznetzk Combinat. Since Kuznetzk coal deposits were far too great to be used solely at the Magnitogorsk smelters, steel mills were also built. Railway cars carried iron from Magnitogorsk to Kuznetzk and coal on their return, a round trip of 3000 miles. The cars were full in both directions.

Manganese was obtained from the famous Chiatura mines in the Caucasus and shipped by rail and water for 3540 miles to Kuznetzk. Fluorite was brought from Eastern Siberia and fireproof clays from Kazakhstan.

* *Pravda*, May 14, 1939.

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The Kuznetzk mills, consuming over 70 carloads of raw materials every hour day and night, or 600,000 carloads annually, became dependent, for all but coal, on sources thousands of miles away. As the mills grew, it was realized that were war or some other catastrophe to cut railway communication iron ore and manganese would no longer be forthcoming, and the mills would be rendered useless.

This strategic weakness of the Kuznetzk enterprises was taken into account by the Soviet State Planning Commission even before the Third Five Year Plan (1937-1942), but it was not until then that sufficient emphasis was placed on the elimination of long rail hauls and the development of local supplies. Today the Kuznetzk mills smelt the iron ore of the nearby Gornaia Shoria deposits. The manganese comes from the Mazul deposits, only 400 miles away, and the fireproof clays are brought from deposits in nearby Berezov. Raw materials are still obtained from the Urals and elsewhere, but the Kuznetzk mills are no longer exclusively dependent on them for operation.

In November, 1941, after the Nazi war machine had overrun most of the Ukraine, a *New York Times* correspondent, David Anderson, quoted the British Ministry of Economy as saying: "The Soviet Union is performing the miracle of long-term planning coupled with improvization in re-establishing all her key industries east of the Volga . . . All previous estimates of Soviet productive capacity for the next year must now be revised upward . . . The eastern provinces across the Volga have been made ready under the Third Five Year Plan until it is possible to predict that, barring a breakdown of military resistance or a collapse of the transportation system, Russia by next June will have reached an industrial potential

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that will substantially make up for losses brought about by invasion."*

In February, 1942, a London report stated: "Russia's great arsenal in the Urals is no longer merely a plan for the future; it has become a reality . . . Who could have predicted that Russian production in January, 1942, would be 40 per cent in excess of the total for June, 1940? There are no ifs or buts about this figure. It is total Russian production, not just a local increase for the Urals . . . Mr. Stalin in his last Five Year Plan envisaged the Nazi attack on Russia. He planned his resistance. By his planning he made this resistance possible. By September, the increase will have jumped to 60 per cent,"† that is, to a monthly output 60 per cent in excess of the total Russian production for June, 1940. Mention is made in this report only of Ural industries, but the writer must have referred also to the interrelated Kuznetzk industries. Otherwise his figure would seem incredible.

And in March, 1942, "even though Germany should occupy all Soviet Europe, or even though Japan should seize Vladivostok," the American geologist Prof. George B. Cressey said, "the Ural Mountains and Central Siberia still have enough mineral wealth to maintain significant military production as long as the Second World War may last."‡

Although the Russian government long ago recognized the strategic importance of the Urals, the rise of heavy industries anywhere in Siberia east of the Urals is of recent date. Apart from artisan gold, silver and copper mining,

* *New York Times,* Nov. 13, 1941.
† *New York Times,* Feb. 2, 1942.
‡ *United Press* dispatch from Washington, D. C., March 13, 1942.

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and a few small iron works at Guriev, Petrovsky Zavod, and Botom, all established by Peter the Great only to be later abandoned, there were no industries to speak of anywhere in the whole of Siberia until the Soviets came to power. The Czarist government remained blind to the importance of Siberia despite attention called to it time and again by certain of the farseeing writers of that day.

"Siberia has a great future," wrote Alexander Hertzen, the Russian liberal democrat who, banished from his native land by the aristocracy, lived and worked in London about the middle of the nineteenth century, "but Siberia is thought of as a cellar in which there is much gold, abundant furs and other wealth, but a cold cellar, a place of deep snows, trackless wilderness, empty of people and full of misery. This is untrue. It is only that the moribund Russian government, which accomplishes everything by force and the knout, is unable to impart that spirited impulse which would push Siberia ahead with American speed."

What Hertzen said of Siberia as a whole applied with particular force to Western Siberia.

Aware of the rapid progress then being made in the United States and Canada, where pioneers were mastering the great West, the Russian liberal could not but lament the lack of "that spirited impulse which would push Siberia ahead with American speed." While pilgrims were crossing the Atlantic to establish a new world in America, a few settlers had penetrated Western Siberia. But the coal and iron remained underground awaiting the rise of industry, the construction of railways, and, especially, an age of new and energetic men. Even agriculture was in a state of extreme backwardness, and the peasants were hopelessly poverty-stricken. Yet the farm land was rich.

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After a journey through Western Siberia and both north and south along the Yenisei river, Professor Cressey wrote this of Siberian soil:

"The finest agricultural soils in the world are the black chernozems developed in the grasslands of the Ukraine and Southern Siberia, and of the western Mississippi Valley. In these soils have accumulated rich stores of humus; and owing to the limited rainfall the essential plant foods, both organic and mineral, have not been leached out of the earth. Crops yield a marvellous harvest provided there is rain. Unfortunately precipitation is characteristically low and erratic in the Russian as well as in the American zone, and the very climatic causes which have made these soils so fertile make them agriculturally precarious."*

By the scientific rotation of crops, the application of the most modern methods of plowing, and by the utilization of long-rooted seed, the Russians are doing much to remove the element of precariousness to which Professor Cressey refers. The general trend is to expand acreage under cultivation, an acreage that grew from 32,058 square miles in 1914 to 97,949 square miles in 1935. The war emergency has further expanded the sown area. In the autumn of 1941 Siberia increased its area under cultivation by 4,000,000 acres.† For example, 750,000 more acres were planted in the Altai Territory in 1941 than in 1940. The increase in the population of Soviet Asia as a whole since the beginning of the Germano-Russian war has resulted in the permanent expansion of farming areas. To give an additional illustration, grain was formerly not grown in the Narym district of the Novosibirsk

* George B. Cressey, "News from Siberia," *Harper's Magazine*, July, 1938.
† *PM*, May 15, 1942.

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Region, which lies far north of the main centers of population along the Trans-Siberian Railway. Today, this region is a grain exporter to the urban centers farther south. Still newer farms are being developed in the Krasnoyarsk Territory, at Igarka, and at other points near the Arctic Circle. So far, however, they produce only for local consumption.

The most favorable land for wheat and sugar beet cultivation lies south of the Trans-Siberian Railway in the Minusinsk basin and in the Altai Territory.

The Altai Territory is reached by travelling southeast from Novosibirsk over the Turkestan-Siberian railway, which passes through Barnaul, capital of the Territory. When we were travelling through Barnaul, a local passenger on the same train, a man engaged in organizing machine-tractor stations in the large Altai farms, pointed with pride to Barnaul's new textile mills. "One of the largest in the country," he said.

From Barnaul, a railway spur runs up into the Altai mountains to Biisk, a famous health resort center and terminal of a motor road over the mountains into Mongolia. A freight transfer service is maintained over this road by a large fleet of motor trucks. "Hundreds of them," said a native Mongol, "and rough going, too!" The Altai Territory was recently in the news when, at the end of 1941, nearly half a million Germans were removed to this rich farming country from the Volga Republic as a precaution against possible sabotage in the war zone.

Extending northeast of the Altai Territory to the Sayan Mountains is the fertile Minusinsk basin, reached either by a spur of the Trans-Siberian Railway, by the Altai motor road, or by a picturesque two-day trip by

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steamboat up the Yenisei River from Krasnoyarsk. Into this basin many Austrian and German farmers were sent as prisoners during the First World War. But they liked the land of their exile so well that, when the war was over, they chose not to leave. The country on either side of the river is low, forested mountains until, as one nears the town of Minusinsk, it levels off to rolling plains. Huge grain elevators stand by the riverside in the larger towns, and farmlands extend as far as the eye can see on either side of the river. From Minusinsk a winding motor road extends south all the way across the Sayan Mountains to the Tuva People's Republic.

Some distance off the motor road, about 45 miles from Minusinsk, is the famous collective farm village of Shushenskoye, situated near a landing stage on the Yenisei, down which grain is shipped to market.

Shushenskoye is an old Siberian village where the first settlers to arrive in 1750 were largely serfs banished to Siberia from the Ukraine. Most residents today know little about the village's far past, but all are proud to inform you that Vladimir Ilyich Lenin spent three years of exile there, leaving in February, 1900.

One old woman tells every visitor, with pride, how she peeped from behind the stove when the famous exile came to visit a peasant woman who had given her shelter. Another aged widow told us how her husband used to shave Lenin and share his pleasantries. One memorable day (in May, 1898) Vladimir Ilyich came into the barber shop and asked the barber to hurry for, he announced merrily, "I have three things to do today. First, to get a shave, second, get baptized, and, third, get married." The local authorities, to whom all exiles must report, had refused to sanction Lenin's marriage unless he were for-

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mally baptized in the Greek-Orthodox Church. His bride, Nadezhda K. Krupskaya, later wrote of the period of their wedding as follows:

"I had been given three years' exile in the Ufa Gubernia (Urals). I made a request to be transferred to the village of Shushenskoye, in the Minusinsk region, where Vladimir Ilyich was living. For this purpose I described myself as his 'fiancée.'

"I went to Minusinsk at my own expense, accompanied by my mother. We arrived at Krasnoyarsk on May 1, 1898, whence we had to go by steamer up the Yenisei . . . It was dusk when we arrived at Shushenskoye, where Vladimir Ilyich lived; Vladimir Ilyich was out hunting. We unloaded and were led into the isba. In the Minusinsk regions of Siberia the peasants are particularly clean in their habits. The floors are covered with brightly coloured homespun mats, the walls whitewashed and decorated with fir branches. The room used by Vladimir Ilyich, though not large, was spotlessly clean. My mother and I were given the remaining part of the cottage. The owners of the isba and their neighbors all crowded in, eagerly looking us up and down and questioning us. At last Vladimir Ilyich returned from the hunt. He was surprised to see a light in his room. The master of the house told him that it was Oscar Alexandrovich (an exiled Petersburg worker) who had come home drunk and scattered all his books about. Vladimir Ilyich quickly bounded up the steps. At that moment I emerged from the isba. We talked for hours and hours that night. Ilyich looked much fitter and fairly vibrated with health. . . .

"As the Zyryanovs often held peasant drinking-bouts at their place, and as family life was uncomfortable there in many respects, soon after the wedding we moved to

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other quarters. We hired half a house, with yard and kitchen garden attached, for four rubles. We lived as one family. . . ."*

Both houses occupied by the Lenins are standing today. We saw them. The single room, where Lenin lived as a bachelor, is now a library. The other "quarters" where the Lenin family shared half a house (a one-story log cabin) is now a museum furnished as it was when occupied by the Lenins. One of its treasures is a high desk at which Lenin worked standing up and from which he could look out the window toward the distant Sayan mountains. Some of the Sayan peaks are snow-capped and Lenin, after having lived as a political emigré in Switzerland, described them as resembling Mont Blanc when viewed from Geneva. With this mountain landscape before him and working at his high desk, Lenin completed his book *The Development of Capitalism in Russia,* which was his answer to the Populist or Narodniki, who said the village commune precluded the rise of capitalism and the class struggle in old peasant Russia.

Of their life together Krupskaya wrote: "In the mornings Vladimir Ilyich and I set to and translated the Webbs' *Theory and Practice of British Trade Unions.* After dinner we spent an hour or two jointly rewriting *The Development of Capitalism in Russia* . . . In the evenings he usually read either books on philosophy—Hegel, Kant, and the French naturalists—or, when very tired, Pushkin, Lermontov, or Nekrassov.

"When Vladimir Ilyich first came to Petersburg, and I knew of him only from hearsay, Stepan Ivanovich told me that Vladimir Ilyich only perused serious books and

* Nadezhda K. Krupskaya, *Memories of Lenin.*

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had never read a single novel in his life. I wondered at this. Afterward, when I came to know him more intimately, we somehow or other never once spoke about this matter, and it was only in Siberia that I found out that this was all a pure legend. Vladimir Ilyich not only read, but many times reread, Turgeniev, L. Tolstoy, Chernyshevsky's *What is to be done?*, and in general had a fine knowledge of, and admiration for, the classics. He had an album, which contained, besides photographs of relatives and old political exiles, pictures of Zola, Hertzen, and several photos of Chernyshevsky. . . .

"Generally speaking, exile did not pass by so badly. Those were years of serious study. The nearer we approached the end of the period of exile, Vladimir Ilyich gave more and more thought to future work . . . Vladimir Ilyich concentrated his thoughts more and more on what was to be done to direct the work along the right course, to assure a correct social-democratic leadership of the Party. How were we to start? In the last year of his exile Vladimir Ilyich conceived the organizational plan which he subsequently developed in *Iskra* [a newspaper founded by Lenin which, translated, means *Spark*], in the pamphlet *What is to be done?*, and in the *Letter to a Comrade.* It was necessary to begin with the organization of an all-Russian newspaper, to establish it abroad, to connect it up as closely as possible with activities in Russia, and to arrange transport in the best way possible. Vladimir Ilyich began to spend sleepless nights. He became terribly thin. It was in these nights that he thought out his plan in every detail . . . The more time went on, the more Vladimir Ilyich was overcome with impatience, the more eager he was to get to work. And here again we were surprised by a police search. They had taken from somebody a receipt

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for a letter sent to Vladimir Ilyich. The letter contained reference to a monument to Fedosseyev [one of the pioneers of revolutionary Marxism in Russia—Trans.] and the gendarmes made this an excuse for an official search. They found the letter, and it proved to be very innocent. They looked over our correspondence and also found nothing interesting. In accordance with an old Petersburg custom we kept all illegal literature or correspondence separate. It was true, however, that this lay on the bottom shelf of the cupboard. Vladimir Ilyich gave the gendarmes a bench to stand on so that they could start the search from the upper shelves, which were filled with various books of statistics—and they got so tired that they did not even look at the bottom shelf, being satisfied with my statement that it contained only my teaching textbooks. The search ended without any complications, though we feared they might make this an occasion for adding a few years to our term in exile. In those days escapes were still not such common occurrences as in later years. In any case, it would have complicated matters had we tried that course. For, prior to going abroad, it was necessary to undertake extensive organizational work in Russia. All went well, however, and our term was not increased.

"In February 1900, when Vladimir Ilyich's exile came to an end, we left for Russia. Pasha, the maid who in these two years had become a real beauty, shed torrents of tears the night we left. She had come to us as a thirteen-year-old girl, scraggy, with pointed elbows. I had taught her to read and write, and she had adorned the walls with my mother's instruction: 'Never, never, spill the tea.' She also kept a diary, where such entries were inscribed as: 'Oscar Alexandrovich and Prominsky (two fellow exiles) called. They sang a "sing," and I also sang.' "

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Pasha was still living when we were in Shushenskoye. She was nearly sixty years old and half blind. We asked her how Lenin had lived in exile; what he did? She replied: "He did nothing. He only wrote. He was always writing, all day long, with papers piled a foot high on his desk. Sometimes I'd see him out spading in the kitchen garden. Then, again, he'd saunter off to the woods hunting game. That's about all he did, mostly writing." Of Lenin's devotion to hunting, Krupskaya wrote: "Vladimir Ilyich was an ardent huntsman, but too apt to become heated over it. In the autumn we went to far-off forest clearances. Vladimir Ilyich said: 'If we meet any hares, I won't fire, as I didn't bring any straps, and it won't be convenient to carry them.' Yet immediately a hare darted out Vladimir Ilyich fired. . . . Late in the autumn, when small ice was beginning to drift down the Yenisei, we went after hares on the islands. The hares were already turning white. They could not get away from the islands, and were jumping around like goats. Our hunters would sometimes shoot whole boatloads."

When his three-year term of exile expired, Lenin left Shushenskoye. Seventeen years later he led the Revolution that established the Soviets. Were he living today, he might return after forty years to find how, under the Soviets, life throughout Soviet Asia even to the remote village of Shushenskoye has been transformed. There are two collective farms in the village. One is named after Lenin; the other after Krupskaya. In the former, 170 householders jointly till their fields, maintain a dairy, raise sheep and pigs, and possess motor trucks and tractors. The Krupskaya collective farm is smaller.

Architecturally Shushenskoye—a curious blend of old type peasant huts and new collective farm buildings—is

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typically Siberian. In former years, a settler would first build a one-room cabin, heating it by a single *pechka* or stove. As his family grew, he added new rooms or lean-tos. One lean-to was usually reserved for sheltering the domestic animals against the rigors of the Siberian winter. The horse and the cow were members of the family circle, and a death among the livestock was mourned as though one of the family had died. Few Siberian peasants were rich enough to build a "large" four-room house as a unit. Even if they were, the house was not a permanent investment. As one old resident in Shushenskoye told us, "On the average about once in twenty years every house in the village burned down."

No longer is the village merely two lines of ramshackle huts strung along a muddy country road. New structures, such as individual small peasants could not have dreamed of building, have been planned and erected as units. These are the cattlesheds, the garage and repairs shops for farm machinery, the tobacco and grain drying barns, all built on land set aside by the collective farm board. The most conspicuous new structure, visible for miles around, is the fifty-foot fire-lookout tower in the center of the village. Next door is the two-story building of the village Soviet. The new cultural life is expressed in modern elementary and secondary school buildings, and nearby there are five large two-story buildings with class rooms and dormitories for the 350 students of the district agricultural school, where personnel is trained in modern farming methods. Large, well-built red cottages house the hospital, and when we were there an opening of a consultation clinic for mothers and children was being celebrated. We met the woman director, a physician trained at the Omsk Medical Institute. She said, "At the meeting where we organized the women all shouted 'Let's call it the Krupskaya Clinic.'

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I asked why. They replied: 'She lived here and knows how badly we fared in the past.' "

The clinic serves twenty-one villages around Shushenskoye. The director told us, "It's a real joy to work here. Everywhere I go the people gladly come to meetings. As little as three years ago, they often did not appear. Now I can telephone ahead and make appointments. Then we had no telephone, and when I needed transportation to make my calls, it was difficult to get even a horse and cart. I recall walking twenty miles to make a sick call. Gradually we won the full confidence of the women. Today, when I ask for a horse, I am often given a motor car to drive me around. The people are awake."

As she spoke, she leafed through the cards of the women who had registered for consultation that morning.

"Twenty-one women came here today," she went on. "Some travelled eighteen miles to see me. Others came from nearer points. All of them were up bright and early. My day began at 3 A.M. when a collective farm woman, very much in need of medical attention, was brought here. I am happy to be of service to these women and children and to help rear a healthy new generation."

A motor highway, paid for by the village Soviet, now links the village of Shushenskoye to Minusinsk. A radio-telegraph station has been installed and airmail service initiated. Since Lenin's term of exile there, the population has more than doubled, being about four thousand persons in 1936, and one of the problems under discussion during our visit was the building of modern dwellings for collective farm families.

What we saw in Shushenskoye reflects not only the rise of a new community life, but of a new spirit as well. Whether one visits a newly established clinic far away in Shushenskoye or the Botkin Hospital in Moscow, the larg-

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est medical unit in the Soviet Union, he makes a discovery as did Ralph Parker of the *New York Times*. After visiting the Botkin Hospital, Parker wirelessed his paper:*

"The standard of medical services in Russia is undoubtedly high, and cleanliness has become almost a fetish. There is none of that old spirit of regarding human life as Russia's cheapest product—a spirit that Premier Joseph Stalin once described in a story told to youths of the Red Army Academy.

" 'A group of Siberian timber haulers,' Stalin recounted, 'returned to the village with one of their comrades missing. When asked where he was, they replied indifferently that he had remained behind. Stalin asked them what they meant and they replied with the same indifference, 'Why, drowned, of course.'

"One of the men then hurried away to water his mare, and Mr. Stalin reproached the others for displaying indifference to human life while lavishing care on animals. Mr. Stalin received this reply: 'Why should we be concerned about men? We can always make men. But just try and make a mare!'

"Thereupon Stalin condemned this former indifference to a human being and told the Red Army youths that 'of all the world's capital, the most valuable capital is people.' "

His words are often quoted as expressing the regard in which human life is held today in Shushenskoye, Kureika, Krasnoyarsk, Novosibirsk, Alma Ata, everywhere under the Soviets. It is the people brought up as the Soviets' "most valuable capital" who are steadily advancing the formerly backward Western Siberia, truly to the standards of America's Middle West.

* *New York Times,* Feb. 1, 1942.

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KAZAKHSTAN

5

Kazakhstan—Country of the Glittering Future

PERHAPS THE FATE OF DEMOCRACY DEPENDS ON WHETHER Chinese armies can continue to receive sufficient supplies for sustained resistance and an eventual counteroffensive. The Burma Road has been cut, but Soviet Asia possesses two routes that are probably more important to the future of Chinese resistance than even the tortuous road from Rangoon to Chungking . . . and Kazakhstan is the terminus of one of these.

So large is Kazakhstan that it seems to stretch interminably from beyond the Volga to the copper mountains of the Altai near China, and from the Trans-Siberian Railway south to the towering snow-capped peaks of the Tian Shan. A map of its 1,059,800 square miles placed on a map of the United States would cover all the states as far south as North Carolina and as far west as the Rockies.

The fact that the Kazakh Republic links southern Russia with central and southern Asia and China is the key to its military value. Across it, for years, has passed a ceaseless stream of aid to embattled China: weapons, ammunition, trucks, fuel, food, and medicine. At points—Semipalatinsk, Sergiopol, and particularly Alma Ata, the capital of Kazakhstan—along the line of the Turkestan-Siberia Railway (which parallels China's western frontier for nearly 500 miles) freight is transferred from trains to fleets of trucks for a long haul through the Chinese provinces of Sinkiang, Kansu, and Szechwan to Chungking. Their route is that followed for ages by the silk and spice caravans trading

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between the Orient and Europe, a road recently reconstructed and continually undergoing improvements. This route, far less publicized than the Burma Road, has probably taken far more material into China.

In the Kazakh Republic there are four major railways, and scores of airports, some of which are equipped to handle one hundred training planes. Here, Soviet air force recruits have been trained for many years. Deep in Kazakhstan, far from prying eyes, are also many of the polygons, or training grounds of the Red Army. Some of the polygons are equal in area to the smaller countries of Europe. In short, Kazakhstan is one of the major regions of the U.S.S.R. for the training of reserves for the Eastern Front.

Ask a Russian what part of the Soviet Union he would choose to found a new civilization, and the answer would probably be—Kazakhstan. In Kazakhstan a new civilization is already being built. In Czarist days, it was a backward colony; today it is classed among the most advanced states of the U.S.S.R. Most of Kazakh industry, railways, educational institutions are less than fifteen years old.

To Hitler, the Kazakh Soviet Socialist Republic must have seemed a great prize, as his Axis troops drove toward the hinterland of the Don river basin in the fall of 1941. Kazakhstan was only a few hundred miles to the east. Its railways would have provided the Nazis with the transportation for outflanking Allied positions in Syria, Iran, and Iraq to approach India and effect a juncture with the Japanese. Hitler did not capture the prize. Events proved that he had not the remotest understanding of Soviet military power and of the importance of Kazakhstan in its general scheme.

Early in the eighteenth century the Kazakhs were nomad

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herdsmen, divided into three states: the Small, Medium, and Great Hordes. By the middle of that century Catherine II succeeded in annexing the Small Horde to her expanding empire. But, although the Khans of the Horde accepted Russian overlordship, the people did not. For fourteen years, beginning in 1783, the Kazakhs under Sarim Datov fought the Russians, until their uprising was crushed. By the end of the nineteenth century all of Kazakhstan was under Russian rule.

The Czarist administrator then began to liquidate the Kazakh people. One Russian General, Weimarn, even proposed "that for the purpose of destroying tendencies to idleness in the swiftest manner, while accustoming them (the Kazakhs) to a better and more settled life, it is necessary to bring about imperceptibly a shortage of cattle and horses, so that having less, they will be less inclined to restlessness and rebellion."

So for many years the country was debilitated. Industrial possibilities lay dormant. Such efforts as were exerted to organize mining and industry were on a very primitive scale. Not until after the October Revolution did prospecting and exploration begin in earnest. Then a discovery was made. The extent of the area's underground wealth had not even been imagined. In Czarist times, many scientists had held that Central Asia had no mineral wealth of importance. Soviet scientists proved this assumption to be wrong; how wrong is demonstrated by the fact that today Kazakhstan ranks first in the U.S.S.R. in the mining of copper, zinc, lead, and tungsten; second in the production of gold, molybdenum, tin, and fluorspar; and third in coal and petroleum.

In order to make this mineral wealth available four thousand miles of new railways were driven (in fifteen

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years) into the steppe, the desert and mountain. Many of the newly discovered mineral deposits were thus linked to smelters, factories, and fuel supplies.

In all, as briefly mentioned above, there are four trunk lines. The oldest is the Orenburg-Tashkent Railway, which enters Kazakhstan from the west via Orenburg near the city of Aktyubinsk, touches the tip of the Sea of Aral, and continues to Tashkent in Central Asia. The second oldest railroad, completed in 1930, is the Turkestan-Siberia road, called Turksib for short. It runs southwestward from Novosibirsk to Alma-Ata, thence westward to the industrial city of Chimkent, beyond which it joins the Orenburg-Tashkent line. These two roads and the Trans-Siberian, which runs through Kazakhstan for a short distance but skirts it in the north for more than a thousand miles, completely encircle the republic.

We have travelled on the railways of Kazakhstan, have completed the circle trip around the Republic over the Orenburg-Tashkent, Turksib and Trans-Siberian lines, but not on the same day, nor in a single day. Kazakhstan is too large. To go around it by rail would consume more than ten days of continuous riding on an express train. But we have made the journey: across extensive grasslands with grazing herds, past seas of ripening wheat, blooming cotton, and glowing melons, across mountains where the sun pokes long fingers in the rosy dawn across the Tian Shan mountains of China, and again across almost endless arid desert where vegetation pants for water, and for life.

Native herdsmen are voicing the new feelings of the people. One of the Kazakhstan poets, inspired by the rhythm of the wheels on a moving train, has written a poem entitled "The USSR—Express," the opening lines of which are:

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Our Union is an Express, flying over bridges,
Past verdant meadows, across the broad acres.
Our land is well off,
Our people the stronger,
And free to move as the clouds,
And this is well known to our enemies.*

While travelling through steppeland, an elderly man with a goatee beard told us how hard it was to travel in the "old days" across the steppe in a wheeled vehicle. You went along easily and swiftly until you came to a stream or river bed. Then you followed the river until you came to a ford, where you crossed—if you could—either by raft or by the aid of horses.

"The best way," he said, "was to travel by horseback. It's still the best way in remote places. That's how I went, spending the whole of this summer among the Kazakh herdsmen far from the railway out in the open steppe."

"What were you doing there?" we wondered.

"I was writing down the folk melodies of the Kazakh people," he answered, and showed us a most amazing collection of musical notes, hitherto unrecorded, for hundreds of Kazakh folk tunes.

"What a curious hobby you have!"

"It is more than a hobby with me," he said. "All my life I have been interested in music. In the time of the Czar, I spent all my money getting a musical education and then, when I had no funds left, being an obscure person, I was obliged to seek employment. The result was that I became a Czarist official and for many years before 1917 lived as such in Warsaw. During the first World War, I was evacuated from Warsaw to the region of Orenburg, on

* From *Kazakh Poetry*, compiled by Tagzhanov and Dzhansugarov (Moscow: State Literary Publishing House, 1934).

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the borders of Kazakhstan. There I listened in the market place to songs sung by the Kazakh traders. I began to record the notes and when I presented my collection to the Union of Soviet Composers, they at once became interested. They have supported my work until today. I have written down the notes of more than two thousand formerly unknown melodies of the Kazakh people. I have been inspired by Romain Rolland. He called my first collection: 'The musical soul of the Kazakh people.' "

Collected in this fashion by an obscure Soviet composer, some of the music of the Kazakhs reached New York in 1942 in the Soviet film-short "Harvest Festival," to be hailed with great enthusiasm.

"Electric lamps," said one reviewer, "are called 'Ilyich lamps' on this west Siberia plain which resembles our own 'Wild West' so closely, and 'Harvest Time' is a brief film about a people who brought a vast desert to life with the help of 'grey-headed Lenin' who 'mastered a riddle, taught us, and vanished away.' "

We witnessed the bringing to light of this music of the Kazakh people and know that something deep is stirring in their hearts; the chord is ringing throughout the Soviet land. One who has been in Kazakhstan cannot forget the words of the Kazakh poet who said to his people:

"Go on, from the covered ox-cart, forward!
There is no road back!"

The Turksib railway is particularly interesting because it represents one of the Soviet Union's earliest achievements in the economic improvement of Western Siberia and Central Asia. It was begun in 1926 under the direction of Felix Dzerzhinsky for the transportation of Siberian coal and grain into the treeless cotton lands of Central

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Asia. Today it effectively taps the mineral wealth both in the Kazakh Republic and in Kirghiz territory, and serves as a carrier for trade with West China and Mongolia. When its construction was at its peak, 55,000 workers were employed, thirty per cent of whom were men with a long history as horsemen of the steppe, engaging in industry for the first time. Within five years, ten or twelve trains a day were travelling between Alma Ata and Novosibrisk, via Semipalatinsk.

A third railroad runs from Petropavlovsk, on the Trans-Siberian, in the very north of Kazakhstan, to Lake Balkhash in the center of the country, while a fourth (built since 1939) connects Kartali, south of Magnitogorsk in the Urals, with Akhmolinsk and Karaganda on the Lake Balkhash route. This fourth line, only 500 miles in length, brings Karaganda coal to metallurgical works in the Urals.

In addition to the four main trunks, there are numerous short spurs, the most important of which are the 321-mile spur from the Orenburg-Tashkent railway to Guryev in the Emba oil fields, the 256-mile line from the Balkhash railway to the copper deposits and refinery of Dzeshazgan, and the 400-mile line from Akhmolinsk below Petropavlovsk to Pavlodar on a spur of the Trans-Siberian, creating in effect (with other lines) a central Trans-Siberian railroad across northern Kazakhstan, whose borders are skirted by the Trans-Siberian main line.

In 1913 the railroads carried 1,280,000 tons of freight; by 1937, the freight load had increased, over the expanded network, to 22,800,000 tons. One hundred and twenty big industrial plants were built between 1928 and 1939; the number of industrial workers rose to 600,000. Since 1939, forty-four new cities and towns have mushroomed in Kazakhstan, each signalizing the development of additional

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plants and industries. One of these is the new city of Stepniak (meaning "of the steppes"), located in the midst of rich gold fields near the Sea of Aral. It already has more than 3000 apartment buildings, a power station, schools, a hospital, and all the other structures of a bustling modern community. River transport has been extended for thousands of miles over the Syr-Darya, Nara, Irtysh, and Ili rivers, 7200 miles of water way being now in operation. In 1937, Kazakhstan's hydroelectric plants generated 290 million kilowatt hours of energy, and in 1940 the total industrial output of the republic was twenty-two times that of 1931, a rate of growth twice as rapid as that of the U.S.S.R. as a whole.* The ultimate future of the Kazakh Republic staggers even the boldest imagination.

But between then and now much remains to be done. Today an aerial photograph of Kazakhstan would show, despite the rapidity and extent of development, relatively few clusters of industries and cities (located mainly along railroads and highways), with vast empty spaces where transportation is lacking. The total railroad mileage is still only 5250 miles: one mile for each 184 square miles of territory. (In the United States there is one mile of railway for each thirteen square miles.) The Kazakhstan figure is scarcely halved if the better highways are added.

Within the last five years the Soviet Union has established a petroleum base in the region of the city and river of Emba. The Ural-Emba oil basin contains reserves estimated at more than 1,290,000,000 tons and covers more than 156,000 square miles. A portion of the basin lies in the Urals, just outside Kazakhstan. The Emba fields have been compared with the petroliferous zones of southern Texas. The Soviet Government has been devoting con-

* *Russia at War,* Bulletin on the Soviet Union, March 18, 1942.

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siderable attention to their further development (they are now third largest in the Union in production tonnage), purchasing for this purpose much equipment in the United States. Hundreds of wells have already been brought in throughout the Emba region as the clatter of American drilling machinery in action disturbs the once-silent Emba nights. From Emba a 434-mile pipeline carries crude oil to a new modern refinery at Orsk in the Urals. Even had the Germans succeeded, or should they succeed in the future in reaching Baku or cutting the Caucasian petroleum regions from the rest of the Soviet Union, Emba's oil would provide Russia with fuel for industrial and military activities.

Rich copper deposits are now being tapped. At Dzeshazgan, in western Kazakhstan, there is a copper deposit estimated at 3.100,000 tons. A copper refinery for that region is now being erected. At Bashekulsk there is a deposit containing an estimated 2,000,000 tons of copper, as well as 2,600,000 tons of lead, and 4,600,000 tons of zinc. At Kounrad, along the shore of Lake Balkhash, where there are more than 2,500,000 tons of copper, a smelter is already in operation. In 1941, the Pribalkhash Copper Smelting Combinat refined more than 100,000 tons of the metal.

In the Lake Balkhash area, one is eerily impressed by thickets of saksaul, a leafless, gnarled and shapeless tree resembling something out of prehistoric times. "One may wander for a whole day on the superheated sand in a forest of old saksaul trees without meeting a single living thing. There are neither birds nor animals. All around is deadly silence. One waits in vain to hear the song of birds, the chirping of crickets, the noise of leaves. As if enchanted, the saksaul forest keeps silence; only in a strong wind can one hear the creak of branches and the rasping sound of

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sand sweeping against the misshapen trunks."* Some have called the thickets of saksaul "dead forests." But that is quite wrong. The trees live, are alive; they have adapted themselves to a desert climate, and produce a hard wood that is used to fire locomotives on some divisions of the Kazakhstan railways.

North of the main copper regions, at Karaganda, is located the Soviet Union's third richest coal basin, with reserves exceeding 50,000,000,000 tons. Before 1920 the yearly production was 35,000 tons; in 1930, it was not a great deal more, but, in 1940, 4,500,000 tons were mined by 15,000 workers. The once small, miserable and poverty-burdened village of Karaganda has blossomed into a city of 150,000 busy people. To take care of the overflow population a new city is being built, eight miles away at the other end of the vein. Karaganda's coal has been greatly in demand since the outbreak of the Second World War and the miners employed in the Shaft No. 18 of Karaganda Coal Trust were recently praised by the Soviet press for overfulfilling their working norms ten to fifteen times. Coal is also mined at Chimkent and Akhmolinsk in Kazakhstan.

East of the city of Semipalatinsk lie the non-ferrous metals of the Ridder range in the Altai mountains. On the Irtysh river, which flows through this region, a large power plant has been built to serve numerous new smelters and refineries. Many of the metals produced in the Ridder range are needed in the United States, and there is no doubt that today considerable quantities are being shipped to us. As early as 1727 Akinfi Demidov, of Tula and Ural fame, began mining operations in the silver, zinc and copper deposits of the Altai, and the metal for innumerable

* N. N. Baransky, *Physical Geography of the U.S.S.R.* (Moscow, 1938).

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Russian samovars and church bells was obtained in this, one of the earth's richest polymetallic regions. In addition to one-half of the Soviet Union's resources of lead and zinc, there are large deposits of gold, cadmium, gallium and other metals. There is silver in the Salair ridge.

Nickel is found at Aktyubinsk, which, in addition to containing one of the world's largest synthetic rubber plants, may soon become known as Russia's Sudbury. Its vast deposits contain one-half of the Soviet Union's known reserves of nickel, exceeding even the large nickel deposits of the South Pacific island of New Caledonia.

But Kazakhstan's wealth is not confined to its minerals; the Kazakh Republic is already a granary of Soviet Asia. More than 12,000,000 acres of land are devoted to the cultivation of wheat and rye, mainly in the north. In the south, 3,000,000 acres are given over to such crops as cotton, sugar beets, and rice. In 1921, only 5,555,000 acres were under cultivation; in 1940, the acreage was three times that amount. The farmers are united in 8000 collective farms, serviced by 330 tractor stations with 25,000 tractors, 10,000 harvesters, and hundreds of Soviet-built cotton pickers. The yield of wheat per acre exceeds that of the United States.

In 1942 the crop producing areas were expanded by an additional 1,000,000 acres to help compensate for grain production lost to the Soviet Union through the Nazi occupation of the Ukraine.

In the south, are many thousands of acres planted with tau-sagyz and kok-sagyz, two native rubber-yielding plants. Kok-sagyz is a dandelion, although not of the common garden-pest variety. It is the Soviets' second most important source of rubber and, this year, is being grown on more

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than 2,500,000 acres. The story of its discovery and cultivation bears telling.

Ten years ago, two young collective farmers, Sprivachenko and Bukanevich, set out to investigate rumors of a plant in the hills of Tian Shan near Alma-Ata, which produced a milklike liquid that thickened when exposed to air. They found the plant and brought it to Moscow, where Rodin, a noted Russian botanist, classified it as a perennial dandelion with a much higher rubber content than has the ordinary variety.

Planting began on a large scale. It was soon noted that during the second year the rubber content was 30 to 40 per cent higher than during the first. The roots—which are first dried in the sun so that rubber may be extracted by a chemical process—contain from 7 to 9 per cent of fairly high quality rubber. Ten acres of kok-sagyz will yield a ton of rubber. Russian scientists say that kok-sagyz will grow in almost any climate, but the yield is greatest when it is planted in fertilized and irrigated chernozem (black earth) or peat soil. On March 26, 1942, Dr. Paul J. Kolachov of Louisville, Kentucky, told the House Agricultural Committee in Washington, D. C., that the plant could be grown in 42 states and that enough rubber could be produced to take care of our rubber needs. He estimated that a yield of 600,000 long tons of rubber was possible if 7,000,000 acres, available for planting, were utilized. In March seeds were ordered by the State Department.*

Progress was reported already in May 1942 according to a news item which said: "Russian dandelions, from which the Soviets obtain rubber, are being grown in Connecticut and other Northern states as an experiment, it was announced today by Dr. D. F. Jones of the Connecticut Agricultural Experimental Station.

* *New York Times*, March 26, 1942.

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"Mr. Jones, head of the plant-breeding department, said 100 pounds of the seed had been sent to this country from Russia by plane, and distributed to 20 experimental stations. A half-pound of seed was assigned to this state [Connecticut] and has been planted at Mt. Carmel, Windsor and other locations.

"The rubber," he said, "was obtained from the tap root after it was dug in the fall, dried and ground to a powder."*

The richest agricultural district of Kazakhstan lies between Chimkent and Alma-Ata, close to the borders of the Central Asian republics. When we passed through here it was spring and the countryside was a veritable paradise of gardens. The fragrance of apple, plum, and cherry blossoms filled the railway carriage with an indescribably delightful aroma—so very welcome after the dust of the desert. Beet fields, vineyards, and cotton plantations stretched to the horizon as far as the eye could see. We were in the zone of "millionaire" collective farms. We visited one such farm, called "Light of the East."

The income of the farm exceeded $600,000 a year. Men and women of thirteen nationalities worked there. We saw Russians, Jews, Kazakhs, Uzbeks, and Ukrainians. The head of the collective farm proudly showed us the vineyards and gardens. Some of the best wine and champagne we had ever sampled was given us. The settlement itself was located in the middle of its fields. Around a central square were a school, a club, and a theatre. We recalled the words of a Kazakh poem:

> "The village sends tractors into the steppe;
> The village is overgrown with hundreds of schools."

As we walked around the farm in the company of a

* *New York World-Telegram*, May 22, 1942.

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former nomad herdsman, we were told the story of the rise of collective farming in the land of the Soviets. The gist of it was this: Today collective farms have become so definitely an integral part of the Soviet way of life that Russian farmers find it difficult to believe that there was a time (not so long ago) when they owned tiny parcels of land or none at all, worked individually to eke a living, lived in eternal fear of the rent collector, and spent their years yearning for a few more rods of land.

But today in place of the long-bearded, individualistic peasants of the past, there has arisen the new Soviet farmer, who is also the backbone of the Red Army. To a great degree victory for the United Nations depends upon him.

Immediately after the revolution, Lenin outlined collective or co-operative farming as the sole path for the elimination of classes in the countryside and of the differences between the village and the city. But for ten years collective farming remained more a wish than a reality.

The cardinal slogan of the revolution had been "Bread, Land, Peace!" Following the revolution, the Soviets confiscated and distributed the great landed estates, increasing the number of small farms from approximately 16,000,000 to nearly 25,000,000. But when the peasants obtained rent-free land, they began to learn from experience that poverty could not be abolished merely on the basis of individually owned small farms. "If we continue as of old on our small farms, even as free citizens on free land, we shall still be faced with inevitable ruin," said Lenin.

The peasants were unable fully to utilize machinery on small farms, even had it been within reach of their meagre incomes. Besides, the great majority were very ignorant and had no means of acquiring scientific knowledge of soil and crops. "Semi-consuming and poor market-yield-

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ing," is the way in which Joseph Stalin characterized the small peasant farm of that period. In 1927, whereas the gross output of grain was 91 per cent of the prewar level, the marketable surplus was scarcely 31 per cent of that level. The cities were without grain. The small and dwarf farms that gave each peasant his own plot of soil had reverted to an economy that doomed not only the farmers but the industrial workers to poverty. Moreover, only the kulak (rich peasant) profited in an economy of scarcity, since he had sufficient surplus to withhold grain for the highest bidder. Marketing was still wholly a system of free enterprise. Not only did the peasants till the soil in the old way, in some places with wooden plows, but they marketed as before. Speculation in land had been abolished, but the speculation in tools and products persisted. There continued to be poor peasants, middle peasants, and kulaks.

The word *kulak* means "clenched fist" and so was fittingly applied to tight-fisted individualistic wealthy farmers, many of whom were permitted to exist because of economic necessity, even after the revolution had wiped out the landlords. Until 1929, kulaks were allowed to rent their land to less fortunate farmers and to hire poor peasants as farm laborers. Their chief interest was not in the soil, but in profit making at the expense of lesser farmers and of the city dwellers who must buy their grain. The kulak refused to sell his grain except at prices far above the level of the income of industrial workers. He opposed the Soviet policy of stabilizing grain prices. He resisted all efforts to increase the grain output, for so long as grain continued to be scarce, the kulaks grew rich. So long as kulaks existed, the Soviet way of life could not be fully established.

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When farmers in Kazakhstan talk about kulaks, they recall Stalin's denunciation in 1929. Speaking to those who opposed forcible methods in dealing with the non-co-operative kulaks, Stalin asked: "Do they know with what derision the kulaks treat our people and the Soviet government at village meetings called to assist grain collectors? Have they heard of actions like this, for instance: One of our agitators, in Kazakhstan, for two hours tried to persuade the holders of grain to surrender that grain for supplying the country. At the end of the talk a kulak stepped forward with his pipe in his mouth, and said: 'Do us a little dance, young fellow, and I will let you have a couple of poods of grain!"*

Not only did the kulaks withhold their grain, but they reduced their sown area and slaughtered cattle, inciting others to do likewise by saying that, if they did not, it "would be taken away."

The middle peasants, by far the more numerous group, had always differed from the kulaks in that they were less well to do, and more earnest in productivity. They were not rapacious; they were hard-working citizens. But so long as individual farming existed, the middle peasants constituted a neutral political force tending in the direction of attaining the status of the kulak, that is, to own more tools and accumulate a surplus of grain with which to speculate in a scarcity market. This great body of hard-working farmers had to be swung to the side of the Soviets.

"However," said Lenin, "the middle peasant in a communist society will come over to our side only when we improve his standard of living. If, tomorrow, we could procure 100,000 first-class tractors, supply them with gaso-

* Joseph Stalin, *Leninism* (New York: International Publishers, Vol. 2, p. 193).

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line and mechanics (and, as you all know, that at present is a sheer fantasy) the middle peasant would cry, 'I am for the communia!"*

What was "sheer fantasy" in 1920 became a reality by 1930, when the Soviet Union began to supply what soon proved to be many more than 100,000 tractors to the farmers and the mass movement was begun to unite the small farms into large collective farms.

In that year the Soviets embarked fully on the project of building state and collective farms, and of totally eliminating individual farming on the whole. As a rule, state farms were established on upturned virgin soil, whereas the collective farms developed in long-established village communities. The state farms were gigantic grain factories, with 125,000 to 250,000 acres under cultivation by mechanical implements, operated by agricultural workers hired by the state. But the state farms, which, in a few years, embraced a total area as large as the entire cultivated farmland of Canada, proved too big. Accordingly, many were split into smaller units for more efficient operation. But they had served their purpose: to give the Russian peasant a bold vision of what could be accomplished with modern machinery. Along with the development of state farms came the establishment of machine-tractor stations (M.T.S.) which, owned by the state, rent out tractors, threshers, seeders, with operators to run them, to collective farms in return for produce and cash. Some of these stations own as many as one hundred tractors and hundreds of other machines.

"The peasants would come in crowds to the state farms and machine and tractor stations to watch the operation of the tractors and other agricultural machines, admire

* *Op. cit.*, Vol. 2, p. 177.

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their performance, and there and then resolve: 'Let's join the collective farm.' "*

The collective farm, as we saw it, is an agricultural artel, meaning that only the land, draft animals, and machinery are jointly owned. But in the early days, even before there was enough modern machinery to go around, the more advanced peasants formed collectives, called *communia*, for co-operative farming. They removed the fences around the strips of land and pooled the earth, stock, and tools. They were surprised to find that, even with a minimum of machinery, their joint and individual incomes increased. The sown area doubled in such *communia* by 50 per cent as the peasants began to plant land formerly idle or serving merely as field boundaries. However, some enthusiasts went to excesses, attempting to collectivize all of peasant life: the dwellings, milch cows, small livestock, and poultry. There was a period, around 1931, when the entire collective farm movement was endangered by these leftist trends, which aroused the antagonism of many sensible peasants; they objected to being forcibly drawn into collectives. A halt was called by Stalin in an article called "Dizzy with Success."

Collectivization proceeded after that in the form of the agricultural artel, which is the typical collective farm of today. In the artel, there was simply no place for the kulak, either on the land (tilled jointly) or in the market, where his individual output could no longer compete with that of a co-operative venture. As early as 1930 the state and collective farms were outproducing the kulaks, who before that had produced more grain than the Soviet en-

* *History of the Communist Party of the Soviet Union* (Moscow: Foreign Language Publishing House, 1939; also New York: International Publishers).

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terprises, although not as much (in total grain output) as had the mass of the individual poor and middle peasants. Once both groups of peasantry turned to collective farming, the death warrant of the kulak, as a class, was signed. Even the Nazis, who openly avow that they will break up the collective farm system and return the land to individual farmers, or kulaks and landlords, have been obliged to add a proviso that, for the present, collective farms are being maintained in occupied regions for the reason that they are "more productive." However, matters have not gone entirely according to the Nazi plan; most of the farmers vacated their collective farms before the Nazi advance, taking their machinery with them to regions in the interior.

By 1935, the income of the individual members of collectives had become so high that few farmers remained unwilling to enter a collective. Many of the collective farmers succeeded, even five years ago, in earning as much as $5000 a year as their share of collective labor. Besides, when it became evident that collective farms were a prosperous undertaking, all members were allotted small plots of land (one to five acres) for their personal use.

At the time we visited the "Light of the East" collective farm, we saw this working out in practice. The cultivation of grain and sugar beets was a collective affair, with each member receiving compensation according to the amount of work he put in. After selling the crop to the government and deducting taxes, the income was divided into shares devoted to increasing the farm's inventory, to extending schools, insurance, and medical care, while one share was distributed to each of the members. In addition, the members received grain and sugar beets for their own use. Field work was apportioned by quotas, called "work-

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days." In a normal day a fast worker might earn two work-days, because he tilled or harvested more than his quota. In a summer of 100 days one member might earn 75 work-days, whereas another might earn 250 or 300 work-days. The pay-off system provides an incentive for individual initiative in production. The higher the output, the greater the marketable surplus.

On their personal garden plots, situated around the houses, the farmers were growing fruit and vegetables, pasturing a few cows and sheep, and raising chickens. They were free to dispose of any or all of their individual products as they chose, by consuming them at home or selling them in the collective farm markets, which had been established in all urban centers, but they could not sell the land. It was owned by the collective farm in perpetuity. The individual plot, however, could be bequeathed to heirs or turned back to the common fund of the farm.

It was obvious, watching the farmers at work, that the difference between the socialized farm and the socialized factory had disappeared. The great dream of Lenin had been fulfilled by his successors in the Soviet regime. The land of workers and farmers had become a land of toilers.

Although wheat and sugar beet crops now rank high in the national output of the Kazakhs, stock raising continues to be the primary agricultural activity. In this respect Kazakhstan stands second only to the R.S.F.S.R.; the 1937 census listed its livestock at 11,000,000 head. The herds were abundant, and for the most part were tended in a collective fashion. But stock raising lagged behind grain farming. In order to stimulate increased output of meat, milk, wool, and hides, each individual household (family) of a collective ranch is permitted to raise as many as 178

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cows, sheep, goats, horses, and camels. As with grain, deliveries are made to the state at prices corresponding to the income of industrial workers, who constitute the consuming market for meat and dairy products. One of the chief stock-raising areas is the steppe north of Aygagiz on the Turksib Railway.

At Semipalatinsk, near the Siberian border, a large meat-packing plant has been in operation for more than eight years, able to handle 2,000 rams, 1,000 hogs, and 500 head of cattle each day. It employs more than 2,000 workers. We could see the huge establishment as we rode along the Turksib railway across the plain. Nearby a large woolen mill was being built to weave the wool coming from the local sheep ranches.

Apart from Semipalatinsk, other cities of Kazakhstan have well-developed industries working on agrarian produce. In Petropavlovsk, Chimkent, Alma-Ata and Ush-Tyube there are mills producing textiles and flour, fruit canneries, meat-packing plants, and creameries. In addition to caring for its own needs, Kazakhstan shipped 90,000 tons of beef, 200,000 tons of milk and butter products, and 8000 tons of wool in 1939.

Kazakhstan is particularly famed for its horses. The steppe provides wide ranges for the breeding of spirited animals for the Red Army cavalry and for the training of riders. Almost every able-bodied man in a native population of three million is a horseman. Reserve divisions of Red Army cavalry are constantly being trained in Kazakhstan, and many daily news despatches tell of the exploits of Kazakhs who are in action along the Eastern front supporting the Tank Corps.

The wresting of tillable soil from the steppe and the desert of Kazakhstan has posed one of the greatest prob-

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lems agricultural specialists have ever been asked to solve. The arid land is not only generally devoid of fresh water-courses, but is saturated with salts. Irrigation alone would not make the soil fertile. Desalting the soil has to be done, and where this has been successfully achieved, fruit and vegetable gardens thrive—mostly along the railway, and in the desert near Aral Sea.

Even in Alma-Ata, the capital, irrigation is required to make the soil produce. The streets are lined with huge shade trees watered by murmuring rivulets flowing in ditches on both sides of the streets. You walk beneath shade trees uphill toward mountains which rise to snowy summits above the city. You are reminded of Denver. Alma-Ata is truly a city of beauty, particularly in the spring, when all the apple orchards are abloom.

The region of Alma-Ata was first occupied by the Russians in 1867, when 15,000 Siberian Cossacks settled there. Alma-Ata itself was just a hamlet famed for its apples; its very name means "Father of Apples." The newcomers converted the village into a fortified outpost and changed its name to Verni, meaning "Faithful." Only recently has its original name been restored to the once sleepy town, which today is a modern city with more than 250,000 people, 100 schools, 15 technical colleges, and 13 universities. The high schools are attended by more than 7000 students. Alma-Ata also has museums, a picture gallery, and theatres, beautiful parks, and a market place glowing with apples, melons, and other delicious fruits.

As a result of the Nazi invasion of the Ukraine, many educational institutions (including even teaching staffs and student bodies) have been transferred to Kazakhstan. Kiev University, one of the oldest in Russia, is now (1942) in Alma-Ata, where Kharkov University has also been

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moved.* In March, 1942, a session of the Soviet Academy of Sciences was held in one of these transplanted universities to discuss observations by Soviet astronomers during the solar eclipse of Sept. 21, 1941, and to evaluate the new knowledge of the physical structure of the sun and its corona.

Soviet motion picture studios have also been evacuated to Alma Ata, which is fast becoming Russia's Hollywood.

Alma Ata is also the site of army and air force training schools. Through the city passes a constant stream of supplies for the armies of China, and a short drive from the city takes one to an airport junction of Soviet and Chinese airlines.

At one time Russian and Kazakh were enemies. "There is no other way of managing the Kazakhs except through massacres," a Czarist official once declared. In his turn, the Kazakh warned, "If a Russian travel with you, hold an axe in readiness." This hatred was fostered by Russian officialdom and by the Kazakh beys, khans, and mullahs, who jointly despoiled the people of the best land. More than a million chosen Russian peasants were settled in Kazakh territory between 1896 and 1914. Enmity between the colonists and the native people was unremitting. When the Czar, during the first World War, tried to mobilize labor battalions of Kazakhs and Kirghizians forcibly, more than 100,000 fled across the border to find asylum in China. Only after the founding of Soviet power did they return to their homeland.† Little, indeed, did the Kazakhs have that would induce them to fight for Czarism.

In eighty years of occupation Czarist Russia spent only $3.30 per capita for education in Kazakhstan; more than

* *Moscow News*, Jan. 5, 1942.

† *Kazakhstan and Kirghizia*, edited by S. S. Krivstev (Moscow, 1930).

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95 per cent of the people were illiterate. In 1940, in comparison, the Kazakh republic invested in education an average of $22 per capita. Whereas there were only 11 schools before the revolution, there are now 8000, including 97 technical schools and 16 universities, with a total enrollment (prior to the present war) of more than 1,000,000 students. Kazakhstan also has 40 national theatres and 800 motion picture houses.

It was not a flood of immigrants, as in the United States and Canada, that recently opened the virgin steppes to exploitation. The Kazakhs themselves succeeded in doing it, with the help of the more advanced inhabitants of Russia and the Ukraine. This assistance has been in the form of money, instructors, directors, and organizers, who in 15 years trained thousands of Kazakh engineers, technicians, teachers, and managers.

The effect of education upon a people so recently illiterate and ignorant is impressive. We recall a visit to Alma-Ata in 1936 when we met the Soviet writer, Vsevolod Ivanov, author of *The Armored Train,* a famous novel, and of numerous short stories about the civil war in Siberia. He was assisting three young Kazakh writers to create a scenario for the first Kazakh motion picture, *Amangeldi,* which was to depict the rebellion against White Guards who fled to Kazakhstan from European Russia after the revolution. From our Hollywood point of view, there were shortcomings in both the scenario and the film. But the impact of that film upon the Kazakhs was great. It was their first, their very own! They had written it; they had performed in it. And while many of the theatres were showing it, other picture houses were displaying H. G. Wells's *Invisible Man,* for which an American, Lars Moën, had made a Russian sound track.

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The Kazakh's love of art and his respect for artists are so great that the country's supreme hero and best known man is not a worker, a warrior, or a politician, but the native poet, ninety-five-year-old Jambul Jambaev. We were invited to hear Jambaev sing one starlit Asian night. We were entranced by the haunting sounds of the native *dombra* as the old man, with yellow, shriveled, aged fingers plucked the strings. As lingering echoes filled the summer air with music, he began to sing this verse in praise of Stalin:

"Arrows are my songs,
I am a marksman keen.
Let not the foe rejoice that I am old.
Strong is my heart,
It beats as one with yours.
You gave my folk new life,
They've heard your call."

In the semidarkness, close to the smouldering embers of the fire, young Kazakhs listened intently, still. And as the old man plucked the strings of his ancient instrument and sang other songs, we thought of how strange his verses must sound to the young people. They had never known the "old," the "bad old times." Jambaev seemed to understand this, for as he gazed upon the young couples, the children, the woman with child, there was deep warmth in his watery eyes. He knew they could not realize all that had happened to him.

One song of Jambaev's is known far and wide. It is the story of the immortal magician Korkut who, accursed by Allah for his sins, had been condemned to wander eternally through Kazakhstan with neither rest nor peace. Wherever Korkut tried to halt—wherever he sought forgetful-

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ness—there he found awaiting him an open grave. Korkut was the Kazakh.

Today the Kazakh is master of his destiny. When travelling through Kazakhstan it is impossible not to realize this. Everywhere the people refer to the farms, the factories, and to the public buildings, as "ours." Much remains to be done, of course. Only the beginnings have been made. But when the war is over and technical skill can once again be devoted to the pursuits of peace, the Kazakhs will write into their future history many brilliant chapters.

Kazakhstan is now where Canada was at the beginning of the twentieth century. What will Kazakhstan be like in 1980?

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SOVIET CENTRAL ASIA

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6

Central Asia—Land of Awakening People

CENTRAL ASIA IS TO THE SOVIET UNION WHAT TEXAS, Arkansas, and Mississippi are to the United States: the nation's cotton belt, with a yield per acre that is second to none in the world, and a yearly output exceeding nine million bales of raw cotton. In Central Asia cotton is king. Almost all industries center around it. Oil wells yield fuel for operating machinery used on cotton plantations; electric power stations generate energy to run the factories making cotton pickers and gins; mills convert raw cotton into thread, cloth, and clothing; and nitrogen plants turn out fertilizer for the soil. There are schools to train cotton agronomists and local administrators. Deputies elected to represent Central Asia in the Supreme Soviet of the U.S.S.R. are very often persons associated with the cotton industry. But Central Asia has other sources of wealth: sugar beets, rice, oranges, oil, coal, sulphur, lead, zinc, gold, radium, and uranium.

Central Asia stretches from the Caspian Sea in the west to the Chinese province of Sinkiang in the east. In the south, it borders on Iran and Afghanistan, and in the north on Kazakhstan. Within the boundaries of Central Asia, as here defined, are four Union Soviet Socialist Republics—Uzbekistan, Turkmenia, Tadjikistan, and Kirghizia. Their combined area is 448,745 square miles, about equal to California, Arizona, New Mexico, and Utah, with a total population of about 11,000,000 people.

In reality, the life of Central Asia begins in the moun-

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tain fastnesses of the Pamir, Tian Shan and Ala-tau ranges. Glacier-born streams careen swiftly through narrow gorges to the foothills below, and finally into the desert, where they soon vanish in the sand. Only two rivers—the Amu-Darya and the Syr-Darya—do not flow into the desert, but flow on northward to the Aral Sea. In the fertile foothills and along these two river valleys most of Central Asia's people live, and there its history has been written.

That history is one of an age-old struggle to extort arable land from the mountains and from the desert. In the highlands, the farms, handed on for generations from father to son, have been "handmade," with soil carried uphill by the basketful on the backs of donkeys, men, and women. Only too often the thin precious dirt has later been washed away by a cloudburst. On the plain, the struggle for survival has centered in the attempt to utilize, to the last drop, the waters plunging down the mountain-sides. Were the rivers, which now succumb to the desert, to flow another five or six hundred miles northward and connect with the rivers that drain into the Arctic Ocean, the geography and history of a large part of the Asiatic continent would have been different.

Because Central Asia has been the scene of the earliest trade routes between the Orient and the Occident, it has been subject to frequent invasion by conquering hordes from both the east and the west. Flourishing cities, built around oases by the toil of generations, have frequently been laid waste, not by nature, but by the ravages of man. In 329 B.C., Alexander the Great sacked and burned the city of Samarkand the Golden, then known as Maracanda, and established Greek domination over the native peoples. Samarkand was later rebuilt, only to be laid in ruins by

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the Arabs, who, in 711 A.D., crossed the Amu-Darya river and founded the Moslem state of Maverannakhr (signifying "that which is across the river"). In the tenth century the land was again overrun, this time by the Turko-Mongols, whose dominion in its heyday reached as far northeastward as the Yenisei valley. Then the Mongol horsemen of Genghis Khan swept westward from their highland home to take and burn Samarkand (in 1221). Finally, in 1369, came Tamerlane, who founded a new empire with Samarkand the Golden as its center. Tamerlane was a cruel tyrant whose atrophied right hand and foot earned him the Persian name of derision—Tamur, the Cripple. But in addition to his reputation for ironfisted cruelty, he left behind him as his greatest claim to fame the wonderful blue-domed mosques and minarets of Samarkand.

The mosque, built as a memorial to his wife, Bibi-khan, is a marble pile with blue stone mosaics. The gorgeous buildings have been described as forming a gigantic porcelain stage, inlaid with gold, bronze, and rose terra cotta, with the sapphire sky for roof. Some of the structures were inscribed by their builders—the best architects and stonemasons of India, China, and Persia—with the explanation that Tamerlane had them built so "that earth might look with pride upon the heavens." There was nothing incredible to the ancient mind in the saying that Samarkand was "the Image of the Earth," and, indeed, today it ranks with the Acropolis of Athens as a memorial to the creative genius of ancient architects.*

But after seventy years of Tamerlane's reign, Central Asia once more fell into decay. The great 75,000-mile system of irrigation canals for which Uzbekistan had been

* I. Sarkizov-Serazini, *The Land of Tamerlane and the Hot Sun* (Moscow: Molodaia Gvardia, 1929).

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famed were allowed to fill with sand, the waterworks fell into disrepair, and even the oases vanished into grey sandy desolation. By the eighteenth century Samarkand the Golden was all but uninhabited.

From the remnants of Tamerlane's empire, however, were carved the Khanates of Khiva, Kokand, and Bokhara, ruled by khans and emirs, who while intriguing against each other waged savage warfare jointly against the downtrodden people. In 1792, the peasants of Bokhara, unable longer to endure the oppression, rose in open rebellion. They were soon crushed, and to make his victory memorable Rakhim-Khan, the infamous Emir of Bokhara, built a minaret out of the skulls of rebels his troops had beheaded.*

But the khans and the emir were divided against each other and, after thirty years of intermittent warfare (1863-1895) against the Czar of Russia, they were subjected to the imperial yoke. By 1895 all of Central Asia, including the Pamir mountains, had been annexed formally to the Russian Empire under the political name of Russian Turkestan. Samarkand was spoken of with satisfaction as the "Turkestan Moscow."

The "Little Father," in distant Moscow, was content to leave local administration in the hands of the Khan of Khiva, the Emir of Bokhara, and the Khan of Kokand. Revolts of the people continued, but were shorter lived because the native hereditary rulers were now assisted by Russian generals, more than their match for cruelty. In 1873, for example, when General Kaufman ordered the authorities "to subject the nomads and their families to complete and utter ruin and destruction," this order

* Yudkevitch, Lev, *At the Gates of Hindustan (Tajikistan)*, (Moscow: Federatsii, 1932).

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was carried out with unprecedented thoroughness. The people of Central Asia became vassals of Imperialist Russia. Although serfdom had been abolished in 1861 in European Russia, slaves could still be purchased as late as 1890 in the open market at Bokhara for 115 silver rubles, five swords, or two guns.

The modern period of Central Asia's long history began in 1920, when Russian Turkestan ceased to exist as a political entity, and the Soviet republics of the Uzbek, Turkmen, Tadjik, and Kirghiz peoples were established. A period of the reclamation of arid wasteland then began. Man turned from his warfare against hostile neighbors to the age-old battle against the desert, and by 1940 had won a million and a quarter acres from the "enemy." Central Asia was again awake.

But once more Central Asia is threatened by invasion. It is through Central Asia and neighboring India, Iran, and Afghanistan that Germany and Japan plan to join forces, and so Central Asia has become the guardian of the U.S.S.R. against possible Axis flank attacks from the Near East, the Indian Ocean, and southwestern China.

The Japanese occupation of Burma and the severance at that point of the Burma road has converted Central Asia into one of the sole supply bases for war materials, including weapons, to China, India, and Iran, and it is fortunate that there are railways paralleling the frontiers of Iran, Afghanistan, and China to permit the movement of military supplies as well as troop reinforcements between the U.S.S.R. and these countries. The Turkmenian republic is connected by highway, via Iran, to Baluchistan and India. Other highways, constructed or improved during the past three years, link Kirghizia to China and Tadjikistan and

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Uzbekistan to Afghanistan. The Soviet Republics of Central Asia are certain to play a highly important role not only in achieving victory for the United Nations, but, later in the post-war economic rehabilitation of Southern Asia. The development of the Trans-Iranian and Trans-Afghan highways during the first year of the Nazi-Soviet war, in particular, is an undertaking of immense strategic significance, and one in which British and American engineers have played an important role.

The Central Asians are inherently brave; they are superb marksmen and unexcelled horsemen. Thousands of Central Asians are now serving in the Red Army. During the 1941-1942 Soviet offensive on the eastern front, Kirghiz and other Central Asian military units, especially cavalry, distinguished themselves to such a degree that even Berlin admitted their utter fearlessness. Only recently, the Soviet press heralded the outstanding morale of 28 Central Asian and Caucasian soldiers, who held off a tank attack near Moscow with hand grenades and gasoline bottles, refusing to yield an inch of Soviet soil, until assistance could arrive and annihilate the assaulting German unit.

Uzbekistan

Known as the "Land of White Gold" or the "Country of Millionaires," the Uzbek S.S.R. is the senior of the four Central Asian republics, both in density of population and in economic wealth. Its 650,000 people live in an area (146,000 square miles) not quite as large as California, but in 1940 its industrial and agricultural output was valued at $1,110,000,000.

Uzbek plantations covering 2,500,000 acres, mostly irrigated land, supply the U.S.S.R. with more than 60 per cent of its cotton. In 1938 the average raw cotton yield per

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acre was 1500 lbs., but yields as high as 12,500 lbs. per acre have been recorded. This year, without reducing the cotton acreage, 170,000 acres of sugar beets were planted and the area under grain this year is being increased by a million acres. This is a 25 per cent increase in one year, evidently planned to help compensate for the loss of wheat lands in the Ukraine. Cotton growing remains the chief occupation, however. There are more than 500 "millionaire" collective farms with incomes exceeding one million rubles. Some earn five million.

The earnings of Uzbek collective cotton farmers reflect the generally prosperous life of the republic. The 1940 average was 25 rubles per person per day in cash, plus agricultural produce. Many earned much more, some doing so well that their names have become known throughout the Soviet Union. For example, Brigade-leader* Dzalilov of the Ak-Altyn Collective Farm earned 42,000 rubles ($8400) in 1941 and Ismail Rasulov, another collective farmer, received 35,000 rubles ($7000).

In much of Uzbek territory the expansion and maintenance of the irrigation system is a vital necessity. Projects completed in recent years include the Dyz-Ket-Ken Canal, a navigable watercourse, irrigating nearly 175,000 acres of land; the 170-mile Fergana Canal, completed with the voluntary cooperation of thousands of collective farmers; and the Dum-Kurgan system on the Surkhan-Darya River. A dam is now being completed in the Katta-Kurghan valley, which will impound an estimated 55,800,000 acre-feet of water, to form what is already spoken of as the "Uzbek Sea," an artificial lake of the future to be ten times larger than Boulder Dam's Lake Meade. Under con-

* This is not a military term, but the name given to the elected leader of a group of workers in a farm or factory.

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struction, also, is the Northern Tashkent Canal, which is destined to irrigate 120,000 acres of fertile land now lying idle. The project is intended to increase the output of food stuffs, not only to supply the cities of Uzbekistan but the armies at the front as well.*

Aware of the vital importance of irrigation, the farm population as a whole participates in the work of repairing old canals or building new ones. Farmers come from miles around—the men dressed in white shirts that hang down outside their trousers; the women in gaily colored gowns. The Young Pioneers march up, with banners waving and preceded by bands of musicians playing native instruments. Trade unions from the nearby cities mobilize their members. It is considered a social *faux pas* not to turn up to do at least one day's work. Regular crews on the construction job help to organize the volunteers, instructing them in the operation of steam shovels and other kinds of excavating machinery. But there is not always machinery enough to go around. Then, literally thousands of men, women, and children swarm over the diggings, pitch in with hand shovels, and remove dirt by the basketful as did their forebears. When the Fergana Canal was under construction there were days when 100,000 people contributed free labor and even organized field kitchens, taking their meals picnic fashion, while native dancers and singers performed, in order not to waste time by going home to eat. The canal literally grew under them. "Just let a steam shovel keep up to us!" bragged one old-fashioned Uzbek.

It is exciting work, this digging of ditches that transform deserts into blooming fields of cotton, melons, and even flowers. Archeologists are assigned as supervisors to

* *Russia at War,* Bulletin on the Soviet Union, March 18, 1942.

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all irrigation and excavation projects; in the construction of the Fergana Canal crude pottery, ornaments, and coins, one dating to the middle of the second century B.C., were uncovered. Not only were relics of relatively minor importance recovered, but while the excavation was being carried on, ninety-two buried settlements were discovered a short distance from the canal itself. Remains of neolithic man have been unearthed and put on display in Soviet museums, where they have attracted world-wide attention. But archeological studies in Uzbekistan have a practical as well as cultural aspect. Traces of ancient and long-buried irrigation canals serve as guides to the fertile fields of ancient days and lead the way to important excavations. Occasionally, long-abandoned canals are cleared and once more restored to use in cotton growing.

Allied, in a sense, to cotton production is the silk industry of Central Asia, particularly in Uzbekistan. In 1939, more than 12,000 tons of silk cocoons were collected, unwound, and woven into finished silk goods, mainly parachute cloth. The big silk-weaving and spinning plants are at Margelan, Samarkand, and old Bokhara.

Many cities in Uzbekistan have awakened during the past two decades: Samarkand, Tashkent, Bokhara. Names famous centuries ago are again prominent, this time not for mosques and minarets or for colorful market places, but for factories, schools and modern invention.

Largest of these cities, center of Uzbek life and hub of whirling activity, its influence reaching far beyond the southern borders of the Soviet Union, is the capital, Tashkent.

Not long ago, before the fall of the Czar, Tashkent was a typical Asiatic city—backward, dirty, malodorous. It was

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divided into two parts—the old and the new. In the old city the Uzbeks lived; in the new, the Russian officials and businessmen. Today the European and Asiatic quarters remain as such in name only. Uzbek and Russian live side by side in both sections, and the city (with a population of 600,000, compared to 247,000 twenty years ago) is the republic's center of culture and administration.

Tashkent possesses the Stalin Textile Combinat, one of the largest plants of its kind in the Soviet Union. It was built at a cost of $75,000,000 and produces more than 65,000,000 yards of cloth per year; enough, if used for uniforms, to clothe thirteen million soldiers. Before the war 5728 workers were employed at this mill.

The Voroshilov Agricultural Machinery Works is another concern in Tashkent, manufacturing harvester combines, cotton-picking machinery, equipment for cotton gins; recently it has set in operation new shops for the production of weapons, especially tanks and artillery.

Minerals, too, are mined in Uzbekistan. At Alkmalik, near Tashkent, a copper refinery is now in operation, refining 75,000 tons of copper a year, while deposits of high-grade lignite estimated at hundreds of millions of tons are being mined near Shurabsk. The coal veins at the Zeravshan mines are said to be 75 feet thick, containing an estimated reserve of 150,000,000 tons. Coal is also being mined at Kugitay and Shor-su. The coal of Uzbekistan is used at present mainly on the railways, but recent reports tell of construction under way on an open-hearth furnace and rolling mill, the first to be built anywhere in Central Asia. This metallurgical plant will exploit newly discovered iron and non-ferrous metal deposits.*

When statistical information was last released (1937) the

* *Russia at War,* Bulletin on the Soviet Union, March 18, 1942.

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Khaudak oil wells in Uzbekistan produced more than 700,000 tons annually, supplying a considerable portion of Central Asia's needs. Output has since increased, and new fields have been discovered at Jar-Kurgan and Uch Kzyl, and near Saidaval in the Khovabad district. Production today must be well above that of 1937, for the 1942 output was estimated at 2½ times that of 1941.

The industrial expansion is reflected, also, in the growth of electric power output. Most of Uzbekistan's 60 power stations have been built since 1929. The output in 1937 was 276,200,000 kilowatt-hours. Since 1937, at least four new projects have gone into operation. The new station on the Chirchik River alone has an ultimate capacity of 270,000 kilowatts, or more than three times the total power capacity before its turbines began to rotate. Chirchik power is supplied to the nearby nitrogen plant, where enough nitrogen fertilizer is produced to meet the needs of the entire cotton-growing area. This plant, like many other Soviet plants, has gone in for war production and is at present making explosives.

The industries of Uzbekistan, centered in ancient Tashkent, had by 1938 a total output greater than the combined industries of Turkey, Iran, and Afghanistan, despite the far greater combined population of these states. Not the least important of the new industries is at Katta-Kurgan, the largest vegetable-oil extracting plant in the Soviet Union.

Not only has industry developed by giant strides in Uzbekistan, but cultural progress has likewise been extraordinary. In the days of Imperial Russia, education was reserved for the privileged classes. Today, there are schools for all: 1,330,000 students attend at hundreds of

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primary schools, 134 higher schools, and 44 universities. Most of the universities and scientific institutions, as well as the national library and book publishing houses are located at Tashkent. Uzbekistan has over 40 theatres, 700 motion picture houses, 1200 clubs, 1300 libraries. Its cultural atmosphere is different from former times, when Bokhara was famed throughout the Arab world for its madrasahs, the Moslem seminaries. Old holy Bokhara was the bulwark of the Moslem priesthood in Central Asia, training annually no less than 16,000 young mullahs. Their number had declined to 600 by 1929* and is no doubt less today, despite the fact that Moslems enjoy the same rights as do other religious sects. Mohammedanism, however, is no longer a dominant cultural influence, for which many women through Central Asia are grateful.

The polygamy practised by rich Moslems was only ancillary to the general debasement of women, who were regarded as little better than livestock. Women were not merely the slaves of men in a legal sense, acquired as property and without any social rights; they were actually segregated from public life as something unclean. Men were told by the mullahs, "If you seek advice on any matter, go first to the mullah. Should he not assist you, go to your father. If he offer not good council, go to your uncle and so on, until if all else fail you, even your horse, then go to your womenfolk, but whatever they tell you, be certain to do the opposite." Women were spoken of as "witches," "old hags," and "winged dragons."

The Moslem attitude was symbolized by the *parandja*, a hideous black veil, covering the body from head to foot, which every woman must wear when appearing outside her

* I. Sarkizov-Serazini, *In the Land of Tamerlane and the Hot Sun* (Moscow: Molodaia Gvardia, 1929), p. 62.

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own home. Unlike the delicate horsehair veils worn by Egyptian Moslem women, the *parandja* violated every feminine instinct for the expression of beauty.

With regard to woman's subjection to man, an Uzbek adage runs:

> "If you drop a stone in a deep well,
> It will sink to the bottom, mother dear!
> If you give your daughter to strangers,
> She will sob her heart out and die, dear mother!"

This was the attitude of young girls toward marriage in the old days when parents arranged all such affairs. One sixteen-year-old Uzbek girl of today expressed herself thus: "I call the *parandja* a jail, a custom of bygone days. Why should I respect the *parandja*? I consider women who still wear the *parandja* ignorant. I am enlightened and aim to get an education that shall put the mullah in the shadow."

As the women of Central Asia assuredly had nothing to gain under the older order, today they are among the most passionate supporters of the new life and of the freedom that has come to them. They did not rise at once. In the days of collectivization, following 1928, when the outside world first beckoned to woman and she began to discover that the world did not end at the walls of her home, the sound of the factory whistle and the merry laughter of collective farmers were strange. But as months and years passed, at first hundreds, then thousands, of women began to enter the farms and factories.

They were hesitant at first, timid and fearful of their husbands and relatives. Though encouraged and protected by equality of rights under the Soviet law, they dreaded the wrath of men who felt themselves outraged. It took great moral and even physical courage to take those first

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faltering steps toward emancipation, and many a story is told of wives beaten unmercifully, some even murdered, when their husbands heard that they had sought work in factories or had engaged in active social work.

At the beginning, the women themselves could not quite grasp why the Soviet government sought to involve women in public life of every kind. They heard speeches mutely, without comprehension, and for long remained unconvinced that they, too, had a place on a par with men and a task to perform. They wondered, said one observer, about being able for the first time in their lives to call their husband's relatives by name, an act simple in itself but out of all keeping with the old etiquette; in the factory, bus, or cart they could sit beside the menfolk; at meetings they could be seated wherever they chose, and not just at the door, in semidarkness. In time, however, the women arose above a multitude of taboos imposed upon them and began to accustom themselves to the new order. They learned the alphabet, began to attend schools, and joined women's clubs. By 1938, more than 40,000 Uzbek women were working in factories and in offices and on collective farms. The *parandja* had disappeared. In one settlement, the women—after a solemn conclave—marched to the public square and tossed their ugly veils into a huge bonfire. Only in remote, isolated *kishlaks* (Uzbek villages) have some women remained bound to the old mores. Today, the Supreme Soviet of the U.S.S.R. includes among its members six Uzbek women, among them the well-known woman pilot Smagina, the architect Tairova, and the people's judge, Kasinova. What is true of Uzbek women is equally true of all Central Asian women under the Soviets.

The debasement of women was undoubtedly one of the causes underlying the dwindling population when Uzbeki-

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stan was ruled by the Czars. But the present trend of vital statistics is upward. The population was 4,200,000 in 1930; 5,222,000 in 1938; and more than 6,500,000 in 1941. Better health services, an assured income, and a rising standard of living resulting in a higher birth rate and lower infant mortality explain, in part, the rising population. In addition, there has been a considerable immigration as a result of the occupation by anti-Semitic Nazis of areas in the Soviet Union where a large percentage of the native population was Jews. Over a million Jews, from Western Ukraine and White Russia, from Bessarabia and Northern Bukhovina, have found a refuge in Uzbekistan.

Not all the refugees are Jews: some are simply war orphans of varied nationality. In Tashkent alone 600 families of office and factory workers have adopted war orphans. A local kindergarten teacher adopted Kolya, an Ukrainian boy. Mari, an orphaned Greek girl from the Ukraine, found a new home in the family of another teacher. The personnel of the Tashkent Agricultural Machinery Works adopted fifteen children, and the Institute of Railway Workers six. Among the refugees are also entire institutions. For instance, the Kiev Industrial Institute is at present functioning in Tashkent.

Most of the Jewish refugees are artisans and workers in the professions, but there are also "Luftmenschen,"—those who had been peddlers, petty brokers, and so on. Gradually they accommodated themselves to the new life in the East. Recently a regular session of the White Russian Academy of Sciences was held in Tashkent, which is the cultural center of the refugee settlement. A Jewish section of the Uzbek Writers' Union has also been organized there, and its officers include Mikhoels, the noted director of the Soviet Jewish Art Theatre, and Bergelson, a noted Jewish

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writer, who is completing a film scenario dealing with Jewish heroes in the Red Army and in partisan detachments. Famous Jewish theatres, including the Jewish Art Theatre, the Jewish Operetta Company from Leningrad, and the Kiev Jewish Variety Theatre, are having great success in their Asiatic localities. The Jewish singer Kusievitsky, former cantor of the Warsaw Choral Synagogue, has been giving concerts to appreciative audiences.

In Uzbekistan, as elsewhere in Central Asia, there is a meeting of divergent cultures. Moslem and Jew find themselves sharing a common soil and are united in their "all out support" of the Soviet war effort. A dispatch to the Russian newspaper *Pravda* from the Uzbek Republic stated, "Collections for the Defense Fund continue with great success. By February 1, 1942, the Uzbek people had contributed 52,000,000 rubles ($10,000,000) in cash, 300 tons of grain, 219 tons of meat, 2 tons of wool, about 19,000 sheepskins, and many other articles. By the end of January, 188 carloads of presents for the troops were dispatched to the front."*

The three remaining republics of Central Asia—Turkmenia, Tadjikistan, and Kirghizia—to which we now turn, have a combined total population less than that of Uzbekistan; but they occupy frontier territory and, therefore, have greater strategic importance. Inbound supplies carried over the Allied Trans-Iranian supply route cross their borders, while if need should arise, outbound supplies can also be shipped by rail to the Afghan border and thence by tortuous motor road across Afghanistan to India. Being border republics, they are not open to foreign travellers except by special military permission. The foreigners

* *Pravda,* March 9, 1942.

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who, in recent years, have visited these parts of Central Asia are few. We did not, but we have talked with some who have.

Turkmenia

Turkmenia, with an area of 171,250 square miles, is almost as large as Germany, but it is desert lowland, which presents an acute economic problem. Most of the people (the total population is 1,300,000) inhabit the fertile valleys of the Amu-Darya, the Tedjen, and the Murgab Rivers, the shores of the Caspian Sea and the northern foothills of the border mountains: the Kopet-Dag, most of which lies in northern Iran, and the Parapamiz, connecting link between the Kopet-Dag and the Hindu Kush mountains.

In these ranges rise torrential streams, most of which, upon reaching the desert, soon lose themselves in the excessively hot sands (the temperature of which not infrequently rises to 160° F.). The Turkmenian is continually faced with the necessity of trying to make fruitful that which is literally a scorched earth by nature. "Water, not earth brings life," he says.

The greatest of the life-giving rivers are the Tedjen and the Murgab. Ere it vanishes in sand, the Murgab River waters the famous Merv oases, to which Pliny referred when he wrote of the fertile Margiana, almost inaccessible because of the sand that surrounds it on all sides. Arab writers of the ninth and tenth centuries also wrote of the Murgab River as losing itself in the desert. Hence, Turkmenia's basic geographic features have altered little in the long course of recorded history.

Before their conquest by Russia in 1880, after 12 years of bitter fighting, the Turkmenians had succeeded in con-

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structing many hundreds of miles of irrigation canals, but by 1917 most of these had fallen into decay. Not until 1924 was the battle against the desert resumed. Then the Turkmenian Republic was formed, the Voluev and Barsig-Kerkor canals were built, and the old Kaushut-Bentsky water system was repaired. Soon afterward the Tashkepru Dam was erected, and hand pumps were replaced by motor power. The area under cultivation grew from 600,000 acres in 1925 to 900,000 acres in 1937. Cotton acreage increased from 155,000 in 1924 to 380,000 in 1937. In 1938, cotton production totalled 116,000 tons and in that year more than 4000 tractors were used in cultivating the fields of Turkmenia.

There remains, however, to haunt the imagination of Turkmenian builders the vast Kara-Kum desert. Geological exploration has revealed that the Amu-Darya River once flowed all the way across this sand to the Caspian Sea near Krasnovodsk. The Amu-Darya now empties into the Aral Sea. All that remains of the old stream to the Caspian Sea is a dried-up river bed, called the Uzboi. But the Turkmenians are seriously considering an attempt to divert some of the Amu-Darya (called the Oxus by the Greeks) into its former bed, thus bringing life to many thousands of acres of the Kara-Kum wasteland.

This remains a project for the future. But even now the people here are employing new solutions to transform the desert. Our own southwestern agriculturalists should be interested in the method of trench cultivation that has been developed in the Kara-Kum soil. Turkoman agronomists have found that a few feet beneath the surface Kara-Kum desert soil has sufficient moisture to maintain life. The desert planters dig down until fairly deep trenches with sloping sides have been formed. Then, on the bottom,

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thin layers of humus soil are placed, and in these the crop is planted. The sloping sides prevent sanding and slides, and the depth protects them from excessive heat and frosts. As many as 60,000 lbs. of tomatoes and 20,000 lbs. of potatoes per acre have been harvested in such "trench" farms. In addition to soil adaptation, desert horticulture is studied in order to find varieties of plants that will thrive in semiarid areas; these are being grown at a number of agricultural experimental stations, such as those at Repetsk, Chelkara, and Iolethan.

No less interesting than this desert reclamation work is the exploitation of Turkmenia's unusual natural wealth. The 7000-square-mile Kara-Bogaz-Gol Bay, called locally the Black Maw, is a natural depository of sodium sulphate (Glauber's salt). The bay is surrounded by land except for an outlet to the Caspian Sea—a narrow, shallow channel, 650 feet in length, through which almost no water ever flows. As a result the bay waters have a salinity twenty times higher than Caspian water. In the bay no life can exist. But the salts are useful in the dyeing, glassmaking, metal smelting, and paper industries, and in the production of a cheap substitute for sulphuric acid.

As early as 1918 Lenin suggested that these natural salt deposits be utilized industrially, but this could not be done until the early 'thirties, when this chemical was reclaimed for industrial use. On the beaches where the salt is deposited by evaporation, huge steam shovels scoop it up by the truckload. Meanwhile a chemical plant was erected to convert the salt into utilizable condition, and the city of Kara-Bogaz-Gol began to arise in the sand dunes along the bay's otherwise desert coast. Today this place is a beehive of activity with 5000 inhabitants.

Another unique chemical enterprise is the sulphur

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plant located deep in the Kara-Kum desert itself, near the Shi-Ikh wells, which at one time were a resting place for camel caravans en route to Kazakhstan. The sulphur plant is linked by a 155-mile auto speedway, the first to be built in Russia, to the city of Ashkhabad. Other sulphur deposits of wartime value are being worked in southern Turkmenia.

To promote Turkmenia's national development, the U.S.S.R. invested a billion rubles during the first two five-year plans (1928-1937). Among other enterprises, large shipyards were built at the Amu-Darya port of Chardjow and the Caspian port of Krasnovodsk. Other construction provided for was the erection of silk and cotton-weaving mills at the capital, Ashkhabad, a busy depot on the Central Asian railway, once called the Trans-Caspian.

New railways linking Turkmenia with Iran are under construction, and another report tells of the beginning of a new 1085-mile line from Chardjow to Gai, an unidentified point. With these railways and the regular steamboat service on the Caspian between Krasnovodsk, Baku, and Astrakhan, the Turkmenian Republic is on the main line of war supplies from the United States to the Soviet Union. Moreover, Ashkhabad, the capital, is a junction on an important highway to India, via Baluchistan and Iran.

Economic progress in Turkmenia has been accompanied by cultural advance. Under the Czars, only seven of every thousand inhabitants could read or write; there were only 58 schools. Today a quarter of a million Turkomans are students in 1500 primary and high schools, 25 technical institutions, and four universities. There are many theatres, motion-picture houses, and workers' clubs.

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Moreover, in recent years much has been done to revive a Turkmenian folk art: rug weaving and dyeing.

"The carpets of Turkmenia," writes Nicholas Mikhailov, a Russian geographer, "are celebrated all over the world. Their deep-red color is soft, their patterns delicate and beautiful. Formerly 30,000 carpet weavers worked individually, but now most of them are united in large manufacturing co-operatives, while some have entered small hand-weaving artels (artisan co-operatives). Before the World War the Turkomans were forced by competition to substitute chemical formulae for their vegetable dyes. Now, dye-yielding plants are harvested on an intensive scale, and the ancient art is being restored. A State Carpet Warehouse has been erected in Ashkhabad, with an immensely rich collection of smooth, bright-colored carpets from the Oasis of Pendin, the rough carpets from the town of Kerki, and the delicately designed rugs of Maru."*

Tadjikistan

All Central Asian Republics share the waters of the Amu-Darya and Syr-Darya rivers, which cross their lands, bring life to desert soil, and make them suitable for cotton-growing. But whereas Turkmenia and Uzbekistan lie in comparatively low land along the middle courses of these rivers, Tadjikistan and Kirghizia occupy the high land out of which the rivers flow. When passing from Turkmenia or Uzbekistan to Tadjikistan or Kirghizia one must travel through foothills into the mountains where Central Asia's rivers rise in one of the world's highest watersheds.

* Nicholas Mikhailov, *Land of the Soviets* (New York: Lee Furman, 1939).

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"Our south is our north," say the Tadjiks to confound the visitor. For them the lowest land with warm climate and lush vegetation is in the north of their country, where the famous long-staple Egyptian cotton is cultivated. But on moving south or east up any river valley in Tadjikistan or Kirghizia we reach that magnificent tableland, the Pamirs, sometimes called the "Roof of the World," because even its valley bottoms are all more than 13,000 feet above sea level. Here the climate is sub-Arctic, and some geographers have called this desert upland a "Tibet in miniature." The mountain crests that breast the plateau attain an average elevation of 18,000 feet. Towering above them in lofty grandeur is the recently discovered Stalin Peak, 24,590 feet high, the highest summit in the U.S.S.R. Another lofty snow-clad summit is Lenin Peak, 23,390 feet high. Comparable in height and wild beauty is Khan-Tengri Peak, which was scaled by a party of Central Asian mountain climbers while we were visiting Kazakhstan, their expedition being filmed as a popular newsreel. Another famous Pamir summit is Mustagh-Ata, 24,360 feet, which rises in China just across the Soviet border and is visible more than a hundred miles away.

The Pamir range, together with the Ala-tau and Tian Shan, is a complicated mountain system, baffling even geographers to describe, yet it is the watershed for all of Central Asia. The Amu-Darya, the Syr-Darya, the Murgab, and the Zeravshan all rise there in high Pamir glaciers, including the Fedchenko Glacier, the longest valley glacier in the world—42 miles long. Near the Petro Glacier the Soviets have established a well-equipped observatory. From these glaciers life-giving waters plunge down to irrigate the plains of northern Central Asia.

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But not all the water escapes from the mountain fastness. Some is held captive in closed lakes, such as Lake Karakul, which is more than two miles above sea level, the second highest lake in the world. The largest of these mountain lakes, Lake Issyk-Kul, in Kirghizia near the Chinese frontier, is nearly half a mile deep and covers an area of 250 square miles. Protected on all sides by high mountains and lying more than a mile above sea level, its waters never freeze and are said to be half as salty as the Aral Sea. Seventy streams flow into Lake Issyk-Kul. Not one flows out.

Vegetation reaches high up the northern slopes of these mountains. In the Zeravshan valley rice is cultivated up to an elevation of 4000 feet, corn to 4300 feet, peaches to 4600 feet, grapes to 5900 feet. Above 6200 feet no grain can be grown in the Swiss Alps; yet in the Zeravshan valley millet is cultivated up to elevations of 6400 feet, apricots to 6900 feet and barley above 8000 feet. The snowline on the northern slopes is around 12,000 feet, higher by 3000 feet than it is in the Alps. The foothill approaches to the Pamirs are covered with apricot, almond, walnut, pear, apple, cherry, fig, and date orchards, or with vineyards. Stately Tian Shan fir trees, which sometimes grow to a diameter of six and a height of 200 feet, cover the northern slopes, except where clearings have been made for fruit trees.

In these mountains of unsurpassable beauty wild life is abundant. Boar, chamois, snow leopard, spotted panther, wild cat, bear, and fox prowl through the forests, or leap from crag to crag over rocky summits. In the very midst of the mountains is Min-Kush, or "the valley of a thousand birds." Here the eagle nests on rocky ledges, and wild fowl of every breed soar aloft in a rare and ex-

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hilarating atmosphere. When hunting, the mountaineers still resort to falconry, using trained eagles or falcons, which, with eyes hooded, sit calmly on the arm of the hunter until a fox, hare, or wild goat is sighted. Once the hood is lifted, the bird soars aloft, spots the prey and swoops down, killing the animal by the force of its fall. The hunter then runs up, retrieves the game and once more blinds the eyes of the bird, again resting tamely on his arm. The value of a trained eagle or falcon is very high, more than a hundred sheep.

The mountains contribute to Tadjikistan and Kirghizia a supreme beauty of landscape, but their tracklessness and inaccessibility are an almost insurmountable handicap to the full economic development of Tadjikistan and Kirghizia. As an example, let us take the Gorno-Badakh-Shan Autonomous Region, with a population of about 50,000 and an area of 25,800 square miles. Much as the Kara-Kalpakian Autonomous Republic around the Aral Sea is an administration subdivision of the Uzbek Republic, so this region is a subordinate part of the Tadjik Republic. But at one time Khorog, the regional capital (located at the edge of a gorge leading into Afghanistan), was entirely cut off from the rest of Tadjikistan by the absence of roads. For years the isolation of the region was taken advantage of by the Agha Khan, head of an Afghan religious sect, who exacted an annual "religious" tithe in gold from the local Tadjik mountaineers.

But by dint of sheer engineering genius, Khorog has at last been connected with Stalinabad and the rest of Tadjikistan by an excellent 468-mile highway called the highest motor road in the world, since it crosses the Pamirs and curves north past Khorog to meet the rail-

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way at Osh, in Kirghizia. This highway parallels the eastern section of the Afghan frontier, along which widely separated custom-houses at Kushke, Kerki, and Termez mark the only roads into Afghanistan.

In some ways the isolation of the Gorno-Badakh-Shan region was typical of all Tadjikistan, whose backwoods inhabitants were looked down upon even by the Uzbeks, especially by those of national chauvinist ambitions. For although Tadjikistan became an autonomous republic soon after 1917, it was under the administration of the Uzbek Republic, not becoming a union republic until Oct. 16, 1929. So recent has been its awakening that it may truly be called the world's youngest modern state. Thus in mountains, roads, and people we reach the superlative. There is no other way to describe this part of the world.

Prior to their rise to full statehood, the Tadjiks had no respite from border warfare, which continued for fifteen years against the counterrevolutionary Basmachi.

To the people of Tadjik, the name *Basmachi* is a clarion call to battle, for the Basmachi were to the Tadjiks what the White Guard Russians were to the Soviet Red Guards. After the Revolution, which dispossessed the beys or local landlords in Tadjikistan, the Emir fled across the border into Afghanistan, where he organized a counterrevolutionary band with the aid of Enver Pasha, who styled himself "Supreme Commander-in-Chief of all the troops of Islam, son-in-law of the Khalif, the vice-regent of Mohammed." But the bandits were routed and their leader was slain by Tadjik forces supported by the young Red Army. For ten more years, however, remnants of the Basmachi under Ibrakhim-Khan carried out sporadic raids on Tadjik territory.

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Speaking in Stalinabad in 1931, after the final rout of the Basmachi, Abdu-Rakhin Khodzhibayev, the Persian revolutionary who became Chairman of the Council of People's Commissars, said:

"Our modern *kishlaks* (mountain villages) have seen immense changes. Each change to us is greater than the highest peak of the Pamirs. But we must do more. Our dekhans (peasants) must not relax in vigilance but be urged onward until each one has an European house, wears good boots, is educated, works in a collective, and has good roads through every village."*

Among the Red Army men who assisted in putting down the Basmachi was the Soviet poet Vladimir Lugovskoi, who has dedicated some of his most inspiring poems to the people of Central Asia with whom he fought. Here are a few lines from one of them:

> "Ye workmen of dry sand, water, and earth,
> I will give up my soul for each one of you.
> We have, all of us have, a land unique
> In the wide world, a land that many seek."

We have met Lugovskoi and have heard him recite his stirring poems. He is today fighting in the ranks of the Red Army as a colonel.

When, in 1931, a *brichka* (wheeled carriage) arrived in Tadjikistan by airplane from a distant factory, the Tadjiks crossed the threshold into a new era. Without means of communication, Tadjikistan never could have developed any significant national life. Before the republic was founded, there were almost no roads in the whole of Tadjikistan's 55,000 square miles, and certainly no freight airplane service. Today, a newly built railway

* Yudkevitch, Lev, At the Gates of Hindustan (Tadjikistan). P. 39 Moscow: Federatsii, 1932.

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links the capital, Stalinabad, with Tashkent in Uzbekistan, and, through that junction, with the rest of the Soviet Union. Narrow-gauge railways service the fertile valley of the Vakhsh river, site of a $25,000,000 irrigation project just being completed. Highways, carved for the most part out of the solid rock in the mountains, connect Stalinabad and Leninabad with Khorog, and regular airlines are in operation. Very little of Tadjikistan's territory is now remote from some form of convenient transportation. In all, there are more than 4000 miles of highway. These roads give access to Tadjikistan's mineral wealth. In the Kara-Mazur range of the Pamirs gold, silver, and lead were being worked even before the Arab invasion. Kara-Mazur was then known as the gold and silver center of the world. Today old and new mines produce, in addition, bismuth, arsenic, tungsten, and zinc. Shafts driven deep into the slopes above the Zeravshan river yield tin, uranium, radium, fluorspar, zinc, gold, and silver.

In the river valleys of the northwestern Pamirs near Lake Rangkul alluvial gold is washed. This is the highest gold field on earth. In the foothills of the Gissar ranges, where Gissar and Astrakhan sheep are raised for their fine-textured wool, sufficient phosphate has been discovered to satisfy all of Central Asia's fertilizer needs for years to come. Polymetallic ores are mined along the Lyuch Ob river.

Oil is obtained in Tadjikistan from the KIM (initial letters of the Russian words meaning Young Communist International) and the Nefteabad ("oil town") fields. The KIM field yielded 30,000 tons of petroleum in 1938.

Prospecting is continuous even in remote mountain areas as yet unreached by roads or railways. Shepherds

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watch their flocks by night and look for minerals on their off-days. Shepherds are actually trained by Soviet geologists to recognize minerals when they stumble upon them. Recently Tadjik shepherds discovered rich deposits of non-ferrous metals high in the Pamirs. Hundreds of peasants came in, braving mountain blizzards, to get mining operations started. One camp was set up in ten days, and mining machinery was brought to it by plane and on the backs of camels so that work could begin at once. Meanwhile, a railway spur was begun from a main line to the mine. In this way Tadjik mountaineers are contributing to the Soviet war effort.

While buried minerals are found and mined, Tadjiks are also producing "white gold" on their plantations.

Four years ago (1938) cotton was planted on 275,000 acres of river-valley land, and in that same year 180,000 tons of the finest grade Egyptian cotton were delivered to the government purchasing organs. Cotton growing is the chief occupation of more than 4000 collectives. In the Fergana valley other agricultural products are fruits, rice, and sugar beets. Alfalfa produces seven crops a year, and more than 2,200,000 head of cattle and sheep roam the fertile valley land.

In 1938 the government appropriated $20,000,000 for the construction of a textile mill, a cement works, two cotton gin factories (the largest cotton gin factory in Central Asia is located at Kurgan-Tyube), a meat-packing plant and a number of hydroelectric stations. By 1939, there were 27 such stations, producing 30 million kilowatt-hours annually. By 1939, the number of large enterprises rose to 92, and Tadjikistan's industrial production was 195 times greater than it was in 1913.

Formerly, the Tadjiks were among the most backward

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peoples. Although there was a national alphabet, almost none of the one million inhabitants could read a printed word. Today, 4700 elementary schools, 40 high schools, 24 technical schools, and four universities are attended by approximately 290,000 students. There are 425 libraries, 160 clubs, and 17 newspapers.

The Tadjiks have a rich folk art, which is being encouraged in its development to more advanced forms of music, dancing, drama, and literature. Already 22 theatres, and even an opera house, have been established, and recently Shakespeare's Othello was performed in the native language at the Tadjik capital.

In April, 1941, a ten-day Festival of Tadjik Art was held in Moscow. The accomplishments of these people, so recently almost totally illiterate, impressed the audience to such a degree that the Council of People's Commissars of the U.S.S.R. voted to reward Tadjikistan. The sum of $1,200,000 was appropriated for a theatre in Stalinabad; $700,000 for one in Leninabad; $500,000 each for theatre projects in Khorog, Shulmansk, and Kulyab. To complete the Tadjik State Theatre of Ballet and Opera, $240,000 was granted, and $600,000 for the construction of an art workers' apartment house in Stalinabad. Finally, the Tadjik Museum of Fine Arts received $300,000.

One of Tadjikistan's cultural contributions to winning the war was a successful tour of its leading actors and musicians throughout Iran in November 1941. At a time when Great Britain and the Soviet Union were negotiating a military treaty with this strategically located country, the Tadjiks were building good will.

The new Tadjikistan shares its frontier with China in the east and with Afghanistan in the south. Articles

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manufactured in the largest towns, Stalinabad and Leninabad, and in Kurgan-Tyube and Khorog are beginning to flow across the border of the Soviet Union into Afghanistan and China, so that Tadjik products are now obtainable in the markets of Kashgar, in China, and in the stores of Kabul, Afghanistan. Tibetans buy textiles woven in Leninabad's silk-weaving mill, the largest in Central Asia.

Kirghizia

Kirghizia, adjoining Tadjikistan, is thought by many scientists to have been the birthplace of the human race, and Kirghizian legend supports this belief. It was related in the winter homes of the nomads that Adam, on being expelled from the Garden of Eden, founded the Kirghizian city of Osh, one of the world's oldest settlements. Fortunately, Adam brought with him ten silkworms; these spun silk to cover his nakedness and gave birth to Osh's silk industry.

This story was told, no doubt, to credulous pilgrims who came to Osh, once promoted as a Moslem shrine to attract visitors to Russia's Turkestan. Silk was indeed produced at Osh and by a most unusual artisan method, which was not out of keeping with the sale of souvenirs or amulets to pious pilgrims. Osh women would hatch silkworm cocoons in small bags suspended between their breasts. The worms required 12 days for hatching in this way, but needed only eight days if the cocoon bags were kept in the armpits or in a cradle beside an infant, so the story goes. This kind of incubator was used from early spring to late fall. The women then sold their "crop" to augment their meager incomes. Today such customs are historical legends. Osh is quite a different town today.

But in former days Moslem pilgrims from all over the

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eastern world regarded Osh as a sacred spot, second only to Mecca among the Islamic shrines. At Mecca, they saw the Holy Mount of Mohammed, of Allah himself; in Osh's sacred mountain they saw the visionary splendor of Takht-i-Suleyman—"Solomon's Throne." A rainbow stood over the cliff. Any mullah educated at a madrasah in old Bokhara who had not been to Osh was wanting in Moslem culture. When he had made the pilgrimage he was acclaimed among the sons of heaven. Not the least to acclaim him were the money-lenders who helped him on his mendicant way.

But if, as the legend has it, Solomon did come from Jerusalem to the birthplace of Adam, and man did originate in Khirgizia, he soon was forced to leave his first home. For centuries, the history of the people was one unbroken record of wars of conquest and religion, of struggle between native leaders and feudal dukes, of banditry, assassination, and betrayal. The people remained in abysmal ignorance of modern learning.

The trade caravans of antiquity crossed over Kirghizia and wound their way into the foothills, up and down the river gorges, and through the mountain passes. In consequence, Kirghizia was frequently held by foreign conquerors. Even today historic mementos can be found, telling of the days when Kirghizia was under the domination of a Zoroastrian empire 1500 years ago. Broken remnants are to be found at Uzgen, a day's horseback ride from Osh.* Later it was part of the Eastern Turkic Empire (sixth to seventh centuries), attested to by the Turkic manuscripts found in the Talass valley. There has also been found an image of Buddha carved by a

* Anna Louise Strong, *The Road to the Grey Pamir* (Boston: Little, Brown & Co., 1931), p. 46.

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Chinese artist at the time when Chinese invaders demolished the great trading center of Suyab (eighth century). On through the tenth century the territory of present day Kirghizia was called Ki-li-ki-tze by the Chinese, who ruled over it as part of the Kara-Chinese Empire. In 1216, the country was overrun by the hordes of Genghis Khan and later by Tamerlane, whose warriors marched with the Koran in one hand and the scimitar in the other, converting the pagan mountain dwellers to Islamism.

In course of time Kirghizia became part of the Khanate of Kokand and as such was one of the last regions of Central Asia to fall before the eastward advance of Russian Czarism. But the Kirghizians, a proud and liberty-loving people, never fully surrendered to Czarism. In 1916, they were still resisting, and thousands were slaughtered at Uzun-Agach by troops commanded by Major Kolpakovsky. The survivors of the massacre fled into the mountains of western China.

The Kirghis Republic today is situated, as of old, along a trade route—that of the Soviet Union to China. The republic borders China on the east, Tadjikistan and Uzbekistan on the west, and Kazakhstan on the north. Its recent development has been similar in character to that of the other Central Asian republics.

In the mountains of the Kirghis Republic salt, oil, mercury, tin, antimony, lead, and gold are mined. The rare earth, indium, found in very few places in commercial quantities, is extracted at Maili-Su. Other ores, containing the rare earths gallium and niobium, are mined at Changyrdash-suzuk. Tungsten is obtained at Lake Son-Kul. Of the ninety-two known elements, sixty have so far been discovered in Kirghizia in commercial quanti-

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ties. In recent years a Mercury and Antimony Combinat has been constructed which today is supplying much of the U.S.S.R.'s requirements of these metals in war production.

From 1938 to 1942 more than $60,000,000 went into the development of Kirghizia's industries. The famous silk industry at Osh was revived on modern lines. A great silk mill now stands beneath the ordinary cliff in the center of Osh, and the former "incubators" of silk worms have become experts in modern methods of silk culture. A new industry has also been established: the coal-mining industry. Coal resources are so extensive that Kirghizia is now sometimes called the "stokehole of Central Asia." New deposits are constantly being discovered, and the production of old mines is increasing steadily. In 1936, 1,000,000 tons of coal were mined in the shafts of Sulyukta, Kok-Yangak, Kizil-Kua, and Naryn. The present production exceeds 2,000,000 tons annually. At the end of 1940, three new veins 147 feet deep and 150-225 feet thick were located at Angren, near the mouth of the Zyan-Saya River. A thousand miners now work there. Most of the coal is shipped to industrial Tashkent. Formerly, Central Asia imported its coal from the Ukraine.

A crucial problem in the development of Kirghizia, as in Central Asia generally, has been that of adequate transportation. Before 1917 no railway existed in Kirghizia. Today, spurs of the Turksib and Central Asian Railways have been extended into Osh and Djalal-Abad in the Fergana valley, while a railway from Kant to Rybachi facilitates the exploitation of Kirghiz coal, lead, and zinc, and gives access to Lake Issyk-Kul. Highways, too, have been built, the most important being the Great Kirghizian Highway connecting Frunze, capital of the

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Republic, with Kashgar in China and with Osh in South Kirghizia.

These improvements in transportation have made it possible to establish 17 hydroelectric stations generating 30 million kilowatt-hours annually for such industries as the manufacture of cotton gins and a cotton-spinning and weaving plant with 100,000 spindles and an output capacity of 51,000,000 yards of cloth a year. Other factories are a knit-goods factory capable of manufacturing 9,300,000 articles of apparel a year, a $5,000,000 clothing factory, an 11,000-spindle woolen mill, a shoe factory and two tanneries capable of handling 150,000 large and 600,000 small skins yearly. These industries consume the raw materials of local agriculture and livestock breeding.

As a part of their contribution to the Soviet war effort, the Kirghizians recently sent a trainload of gifts—manufactured goods and agricultural produce—to Leningrad. This train was one of the very first to get through after the Red Army had pierced the German lines and had reopened rail traffic to Leningrad.*

The fertility of the Fergana valley is demonstrated by its dense walnut and pistachio groves, its apple orchards, 37,000 acres of sugar beets and 160,000 acres of cotton. Two large plants in the nearby Chu valley refined 100,000,000 lbs. of beet sugar in 1937. Hemp and kenaf, a peculiar plant whose fibers do not absorb water, are grown in the Chu valley; sacks made of kenaf are almost invaluable in the sugar industry and for certain military uses. Kendyr is another extraordinary local plant that is useful in the manufacture of artificial silk, conveyor belts, parchment, rubber, gunpowder, alcohol, tar, certain acids, and (from residual pulp) building- and firebricks.

* *New York Times*, April 7, 1942.

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The area suitable for cultivation is constantly being increased by expanding a network of irrigation canals. In the Chu valley, the Chumysh dam provides power and water for the irrigation of more than 100,000 acres of once barren land. There are more than 5000 tractors and 600 harvester combines on the collective farms.

Kirghizia contributes much livestock to the Soviet Union. The number of cattle is multiplying at the rate of nearly 25 per cent annually; a recent count gave the total head of livestock as 3,000,000. The small Kirghiz horse, which can run a hundred miles over a dry road, across desert sand, or along a narrow mountain trail without tiring, is highly prized by the Soviet cavalry. Cross-breeding with English and Don river horses has improved the strain.

The best grazing lands are in the south of the republic, while the largest abattoirs are in the north, with the ranges of the Tian Shan mountains between. Before the war cattle were shipped by rail to the stockyards, which not only burdened the railways but entailed great expense for fodder en route. To relieve the railways for wartime traffic, one of the biggest cattle drives ever undertaken in Kirghizia was carried out in 1941. Hundreds of drovers and veterinarians accompanied the overland drive. The cowboys of our own Wild West would have reveled in this five-month trek across the central Tian Shan ranges, in which one drover is reported to have brought 5000 head of cattle a distance of 500 miles across six mountain passes averaging 12,500 feet above sea level. The weight on the hoof of his cattle increased by 170,000 lbs.*

Until a few years ago there was no written alphabet of

* *Moscow News*, January 12, 1942.

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the Kirghiz language; the great majority of the people was illiterate. Today, the Kirghiz have an alphabet, and in 1939 there were 280,000 pupils in the republic's 1500 elementary schools, 119 high schools, and three universities. More than 20,000 teachers gave instruction in the native language from books printed in the new alphabet.

It has been the Soviet policy from the beginning that native languages, customs, and culture should be respected and encouraged. They are the lifeblood of a people or nation, which is defined as being composed of people who occupy a common native soil, speak a common language, and have risen in history with cohesive national aspirations. However, not all nations stand on the same level of economic development, and the small peoples in Central Asia were conspicuously backward, having been held in abject fealty by Czarist Russia. How could these people be led forward, not only in accord with their national aspirations but also toward a more advanced form of economic life? This was the question that was faced by the Soviets on coming to power. Said Stalin in 1921:

"The fact of the matter is that a number of peoples, mainly Turkic peoples—about thirty million in all—have not passed, have not had time to pass, through the period of industrial capitalism, and consequently have no industrial proletariat, or practically no industrial proletariat, and as a result will have to pass from primitive forms of economy to the stage of Soviet economy without passing through the stage of industrial capitalism. In order to effect this difficult but by no means impossible operation, we must take into account all the peculiarities of economic life and even the history, social life, and culture of these peoples. To transplant to their territories the meas-

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ures which are effective and important here, in the centre of Russia, would be absurd and dangerous. It is clear that, when putting the economy policy of the R.S.F.S.R. into practice, we must unfailingly take into account all the peculiarities of economic life, class structure, and historical past which mark the border regions. I do not stop to mention the elimination of such incongruities as, for instance, a demand by the People's Commissariat of Food, in connection with the food quotas, for the delivery of pigs in Kirghizia, where the Mohammedan population never possessed pigs."*

Several years later Stalin said further: "Kirghizia, leaning in part on Chinese Turkestan and in part overlooking Hindu Kush into the great Hindustan, occupies an especially important position from the point of view of the propagation of Soviet ideas in the East. The task of Kirghizian workers consists in having to attract the toiling masses of the country into administration, to assist in establishing national economy, strengthen the Soviets, improve methods of government, raise the level of national culture, make Soviet power close and dear to the people, and thus show the neighboring nations in practice the superiority of the Soviet system over the patriarchal, feudal, and bourgeois."†

That Kirghizia is doing this is evidenced by the fact that in addition to its many schools, there are now in the republic 17 theatres, 50 newspapers, 3 magazines, 1350 libraries, 250 motion picture houses, and 300 clubs. Engineers, economists, educators, and architects are working toward one end: to raise the living standards of the

* Joseph Stalin, *Marxism and the National and Colonial Question* (New York: International Publishers), pp. 104-5.

† *Pravda*, Moscow, May 11, 1938.

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Kirghizians until they are as high as elsewhere in the Soviet Union.

Such are the republics of Central Asia. Their rapid economic expansion resulted, at first, in an acute shortage of skilled labor. Gradually, however, scores of thousands of nomads and seminomads became industrial workers and as many others became collective farmers. To teach them and to augment their usefulness, thousands of engineers, weavers, machinists, tractor drivers, and agricultural experts were imported from other parts of the Soviet Union. For example, immediately after the outbreak of the present war when Nazi Germany occupied western Poland and the Soviet Union eastern Poland, after following which the union republics of Latvia, Lithuania, and Esthonia joined the U.S.S.R., large numbers of skilled workers who had been unemployed migrated to the industrial centers of Central Asia. More recently, migration has been accelerated by the Nazi occupation of the western border republics of the Soviet Union.

Central Asia, under the Soviets, is a fascinating subject worthy of the numerous outstanding books that have been written about it. If our chapter on this crossroads of culture, along which so many of the supplies of the United Nations are passing today, has aided in enlightening the reader on its importance as a defense outpost of the United Nations, it has served its purpose. One of the great lessons to be learned from the Central Asians is that, with the aid of friendly people more advanced industrially, an economically backward people can progress directly and rapidly to the age of the machine, the radio, and the airplane.

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7

Yakutia—Republic of Gold and Reindeer

HAD WE WRITTEN ABOUT CENTRAL ASIA MANY CENTURIES ago, we should have had to include among its numerous people the Yakuts, whose herds then ranged the grasslands near the Aral Sea. Today the Yakuts no longer inhabit Central Asia, but the Lena river valley in northeastern Siberia where they have their own republic.

The Yakutian Autonomous Soviet Socialist Republic, which is part of the Asiatic territory of the R.S.F.S.R., extends from Lake Baikal northeast for more than 1500 miles along the Arctic coast to Nizhne Kolymsk; in the south, it borders the Chita Region. Its western boundary is the Krasnoyarsk Territory and the Irkutsk Region, and its eastern boundary is the Far Eastern Territory. In the east and northeast there are fairly high mountain ranges, some of their peaks being nearly two miles high. Although its area is five times larger than that of Japan and Manchukuo, its inhabitants number only 400,000. It is the most sparsely settled republic in Soviet Asia.

The Lena river valley has long been famed for its gold mines, but until recently the recovery of the metal was by artisan methods. Prospectors roamed the marshy taiga during the hot summer in quest of a fortune from the ground for themselves. It was a case of "finder's keepers." But when Soviet citizen Tarabukin came upon an "Eldorado" in the summer of 1923, he did not stake a private claim. Instead, he reported his important discovery to the Soviet authorities, and a party of state pros-

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pectors arrived almost at once at the upper Aldan river, a tributary of the Lena. Within a few months gold was being mined from Tarabukin's "find," and by summer of the next year, 1200 workers were needed. Then a real "gold rush" began. Into the Aldan fields poured a stream of miners, totalling 13,000 by the end of 1925. Gold production in Yakutia, as elsewhere in the Soviet Union, is under the administration of the State Gold Trust, which publishes few official figures, but the output of the Aldan gold fields must be very high, for the new mining towns have a population of 50,000.

In climate and terrain, as well as in gold, Yakutia might be compared to the Northwest Territory of Canada. The Lena river, like the Mackenzie river in Northwest Canada, drains the interior of Yakutia, spawning its labyrinthine delta in the Arctic Ocean. The climate is subarctic, and beneath the surface the soil is permanently frozen; not a solid mass of ground, but a mixture of rocky soil cemented by ice, in which some rare spring water here and there remains unfrozen by force of its motion. Such underground waters are found largely along rivers or near other large bodies of inland water.

Whereas all rivers freeze almost solid during the Siberian winter, the sporadic subterranean streams continue to flow with mounting pressure until at some point they break through the frozen surface and turn to mounds of ice, continually fed from below, rising to ten or twelve feet in height in the course of winter. Here and there, also, an abandoned hut near such an outlet becomes so filled with ice that the structure bursts asunder, leaving only a frozen mold. Barrels placed with their open heads down will likewise fill with ice until they resemble the bellies of natural snowmen.

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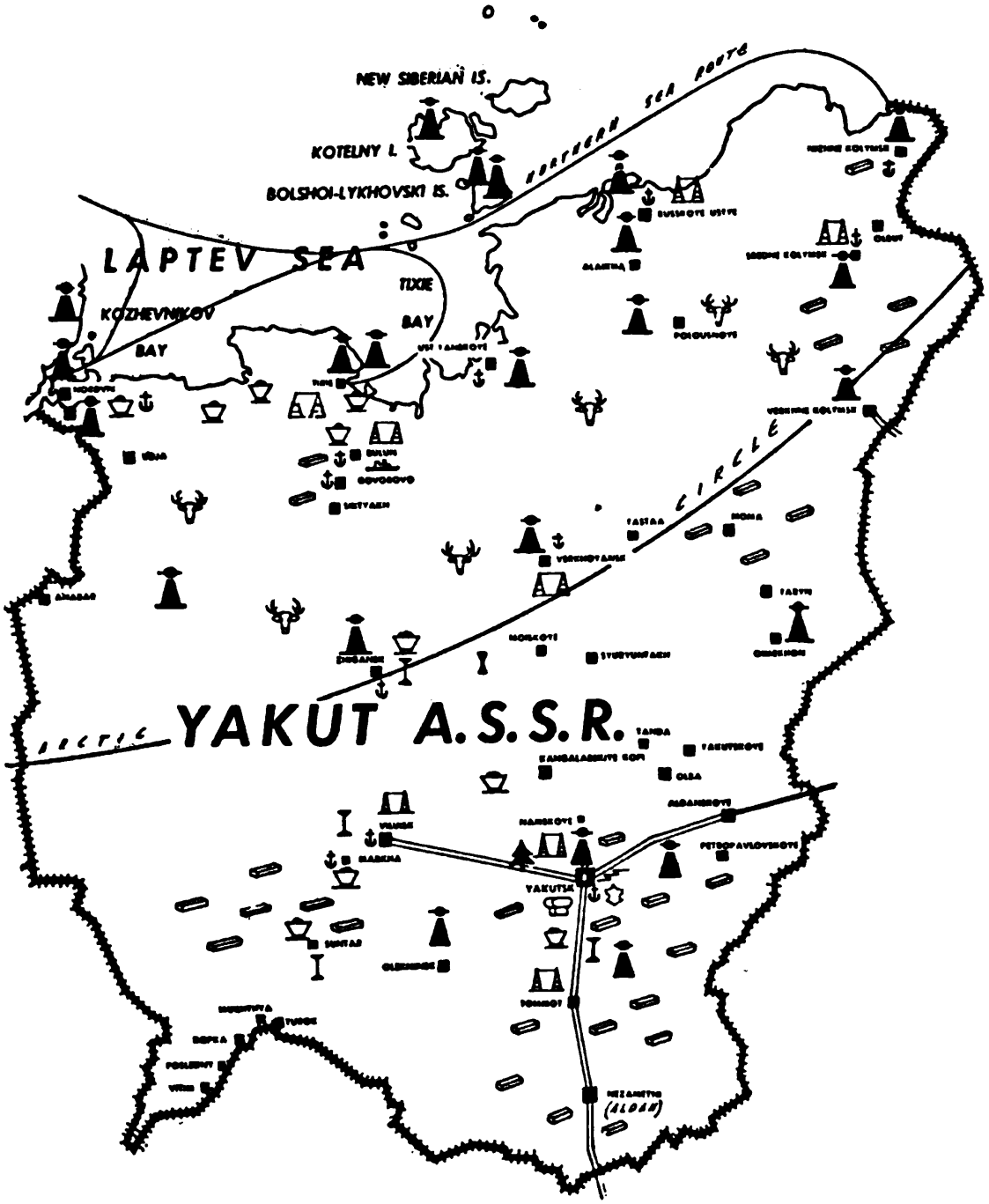

YAKUTIA

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Soviet highway engineers have had to do special research to combat this peculiar winter formation of ice and the general effect of the summer thaw. The surface soil melts to a depth of only a few feet; the subsoil remains frozen, except for the rare underground streams. One method evolved to solve these problems has been called the "cold storage method." Erratic ground waters are avoided or isolated; where there is a solid foundation of permanently frozen ground, this is protected from the effect of the summer's intense heat by a special kind of ballasting which prevents the cold from escaping.

When water mains are laid in frozen soil, steampipes must be placed alongside lest they freeze up. If boilers and furnaces are built on foundations insufficiently insulated from the frozen soil, the heat generated will soften the seemingly hard ground beneath, the foundations will settle and the walls cave in. In the shafts of mines such as the fluorite mines at Amderma pumps have to be kept going night and day to draw out water that seeps in both from underground streams fed by the sea nearby and from surface thaw water, which melts the ice on the shaft faces.

When the surface thaws, during the hot summer, there is little opportunity for the thaw water to be absorbed by the frozen subsoil and so it saturates the top soil. In consequence, there is a layer of marshy earth that nurtures luxuriant stands of timber and fine crops of grain, vegetables, and even melons in areas where the timber has been cleared. More than one-half of Yakutia is covered by unbroken forest, the most valuable tree of which is the famous Siberian larch, an unusually hard and rot-resistant wood much prized in the manufacture of railway ties and airplanes, and in the construction of dams.

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Where the forests have been cleared, some 250,000 acres are under cultivation. The development of a special type of grain has made it possible to gather excellent crops of wheat and rye. In 1938, there were 30,000 agricultural machines in Yakutia. Especially noteworthy is the growth of potatoes, cabbage, beets, onions, carrots, and other vegetables in the Verkhoyansk region above the Arctic Circle. Throughout Yakutia, market gardening in the vicinity of every settlement is encouraged. Were it not for the frozen subsoil, the rainless summers would create "dust bowl" conditions and a desert vegetation typical of the central part of Kazakhstan.

In the district of Verkhoyansk, where the Pole of Cold is located, the winter temperature sometimes drops to 94° below zero, and water splashed out of a glass in the open falls to the ground as ice. The inhabitants say that they are "quite warm" when the thermometer registers only 45° below zero. Be that as it may, winter lasts from seven to eight months.

Since the fourteenth century the territory of the republic has been inhabited by the Yakuts, Asiatic aborigines whose forefathers are said to have been driven north from rich grasslands along the warm eastern shore of the Aral Sea by the Mongols under Genghis Khan. Before settling the territory now known as Yakutia, the invading Yakuts pushed before them other peoples like the Tungus and Lamuts, until these people were far north of the Arctic Circle, where they are to be found today.

In the early seventeenth century, when the Russians reached the Lena, they found the Yakuts in full possession of the valley, but approaching the country from the north down the Vilui river, they encountered the Tungus, be-

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lieved to be a northern branch of the Manchus, of Manchuria. Although they were but one of numerous indigenous peoples—the Evenki, Orochans, Luoravetlans, Oduls and others—early explorers frequently applied the name Tungus indiscriminately to all the people, distinguishing between them only according to the livestock they possessed. Thus, they described the Dog-Tungus, the Reindeer-Tungus, the Horse-Tungus, and the Forest-Tungus who had no animals. The Horse-Tungus were evidently the Yakuts, who brought the animals with them from Central Asia. The Luoravetlans, like all far northern peoples, live as reindeer herdsmen. Whatever the people were first named, they were all nomadic and lived a tribal life resembling in many ways that of the American Indians.

The conquest of Yakutia by the Russians was an additional factor in driving the indigenous people ever northward, if not out of existence altogether. Of the once numerous Oduls, only 400 were alive in 1914. Nor was the lot of the Yakuts improved, although they, being a virile people, became the most numerous in the entire country (80 per cent of the total population). The Czarist occupation brought no change to their mode of existence; they continued to depend on their herds and the hunt for a livelihood. There were many seasons when illness struck down the herds and the hunt failed, leaving them without fresh bear or deer meat on which to live. Yakutian folklore is replete with tales of great "hungers" when the Yakuts lived on putrid fish, pine saplings, and roots of plants. Agriculture was unknown. The Yakut lived in a smoky yurta (wigwam), half of which was occupied by domestic animals. Trachoma and tuberculosis

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took a terrible toll of the Yakuts, so much so that until recently they were a dying people.

To add to their bitter struggle for survival, Czarist conquerors imposed a fur tribute known as "yasak." A report compiled in 1675 lists 10,686 people in 35 Yakut settlements turning over 18,450 sables, 49 sable backs, 11 black foxes, 52 cross foxes, 6284 red foxes, 2 brown foxes, 1 red-brown fox, and 1 red fox coat. Not only were the Yakuts forced to pay the yasak, or general tax, but the skin of every tenth animal killed had to be surrendered to some official or institution—the military governor or the church.

In the nineteenth and twentieth centuries, many of the simple Yakutians, especially the few townspeople seeking paths to a new life, found them in following the revolutionaries whom the Czars began sending into Yukutian exile. When, in December 1825, a palace revolution aimed at the formation of a constitutional monarchy in Russia was suppressed by Czarist guardsmen, the Decembrist leaders were banished to Yakutia. Later, in the 1870's, the famous Russian revolutionary philosopher, N. Chernyshevsky, the writer Korolenko, and others were exiled to Yakutia.

Another of the famous names on the honor roll of exiles to Yakutia is that of the late Sergo Ordjonikidze, who subsequently became Soviet Commissar of Heavy Industry and in that capacity was the superior of Colonel Hugh Cooper, the American engineer who built the great Dnieper Dam that the Soviets blew up in 1941 to prevent its use by the Nazi invaders. News of the Russian revolution in 1917 reached Ordjonikidze in his place of banishment, a settlement of 16 households south of Yakutsk. There, he was not only an exile but a physician

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to the local population for a radius of more than 250 miles. In this respect, he resembled his fellow Georgian, Joseph Stalin, who had been banished about the same time to Kureika on the Yenisei River, in the neighboring region now known as Krasnoyarsk Territory. We have met and talked with local inhabitants at Kureika, who told us about Stalin's first-aid kit, the only one in the hamlet, always available for aid to the sick at any hour of the day or night. At Kureika, which lies on the Arctic Circle, the people also spoke of the kitchen garden that Stalin cultivated as a hobby and the fine cucumbers and turnips he grew there, the first ever seen by local people.

With the Russian revolution of 1917, the political exiles of Yakutia and all Siberia were liberated. Most of them, like Stalin and Ordjonikidze, went immediately to Petrograd, the hub of political life from which new lines of power radiated to the remotest area of the former empire. In April 1917 greetings were sent by E. Yaroslavsky, formerly in Yakutian exile, to the first Congress of Yakuts and Peasants ever held.

"We are convinced," read the message, "that the Yakut people will employ their new-found freedom to develop with all their strength a friendly, fraternal union with the peoples of Russia. From now onward the Yakut is not an alien; from henceforth he is a free citizen."*

The course of the revolution in Yakutia followed a course similar to that of the civil war and intervention in Siberia as a whole. The political forces behind the counterrevolution were the *toyons*, or native gentry, the orthodox priests, merchants, and former Czarist officials. Although a Soviet of Workers and Soldiers deputies was

* G. Kolesov, S. Potapov, *Sovietskaia Yakutiia* (Moscow: Sotsekgiz, 1937), p. 86.

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organized in Yakutsk as early as the spring of 1917, more than five years of internal upheaval ensued before the new government was firmly established. Several times the city of Yakutsk changed hands. For many months in 1918-1919 it was under a military governor appointed by Admiral Kolchak, of whom more later.

"The Kolchak rulers thought they had 'mopped up the Bolshevist infection,'" writes one Russian historian. "But they miscalculated. An underground Communist movement continued to function in the city of Yakutsk, maintained contact with comrades imprisoned, and carried on agitation among the workers, peasants, soldiers, and students."*

When the support of the soldiers in the local garrison had been won, the movement flamed into open rebellion, and in the dead of the Siberian winter, on December 14, 1919, the working people of Yakutsk re-established Soviet power in the city, liberated imprisoned comrades, and drove out the White Guard officers. The struggle, however, continued in remote villages to which the counterrevolutionaries fled. Civil peace was not finally established until 1922. In that year, the Yakut Autonomous Soviet Socialist Republic was created.

The republic has progressed steadily. In 1927, there were eight small factories, employing about 100 people. By 1939, many industries had arisen (70 in all), including lumber mills, coal mines, power plants, and cement and food factories. One of the outstanding food factories is a refrigerator ship, which in 1941 began to ply the Lena river collecting, preparing, and canning some of the more than 60,000,000 pounds of fish that are caught annually, for delivery to the main inhabited centers of the

* *Op. cit.*, p. 92.

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republic. During the first and second five-year plans $200,000,000 were invested in Yakutian industry.

Although the Aldan gold fields continue to be the most important enterprise, gold is also obtained at Allakh-Yun (since 1932) along the northern Indigirka river, and in the basin of the Vilui river, located in the interior of Yakutia. At Verkhoyansk, along the Yana river, tin mining is being developed on a large scale, and the West Verkhoyansk Tin Combinat is supplying a large portion of Soviet needs. Other products are nickel, molybdenum, zinc, lead, and silver. The number of people in the new tin-producing region is reported to have grown from 500 in 1938 to more than ten times that number in 1941.

Of the new towns, the newspaper *Aldan Worker* writes:

"Impassable jungles have been transformed by the workers into a park for culture and rest; with walks of golden sand, volleyball courts, rifle ranges, dancing floor, and a mass playground surrounded by flower gardens. All this delights and gladdens everyone who visits this place now, where troupes of Moscow actors come to provide us with the best in modern entertainment."

In the Verkhoyansk area construction work is booming owing to the development of river transportation along the Lena and Yana rivers. These steamship services are linked with the Northern Sea Route. In the basin of the Tolba river, a tributary of the Lena, shallow oil deposits have been discovered and their exploitation is beginning. The Nordvik region, near Kozhevnikov Bay, also produces oil now. This is the richest oil deposit yet discovered on the shore of the Arctic; it is rich enough to supply fuel for polar aviation and sea and river transportation. In the same region, at Kuzyg-Tus, salt mines are being developed, whose product is to be sent via the Northern Sea Route

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to western and eastern Russia for the fishing industry. The reserves are estimated at 50,000,000 tons. Up to 1936 only 22 per cent of the territory had been explored, but no fewer than 350 deposits of valuable ores and minerals had been found, including 50 deposits of coal and iron. Although the Yakuts knew how to smelt iron before the Czarist occupation, they well nigh lost the art after being subjugated. Iron was smelted from deposits at Botom for use in building the ships of Bering's expedition in the early eighteenth century; subsequently the Botom Iron Works were abandoned. Only within the past decade have they been rehabilitated with a present annual capacity now of 250,000 tons of pig iron.

The total coal reserves of the republic are estimated at 50,000,000,000 tons. The Sangar-Khai mines, Yakutia's main coal producer, are now shipping more than 50,000 tons a year, but this is already insufficient to meet the needs of the Northern Sea Route and of shipping on the Lena river and its tributaries. The Kangalassk mine near the capital, Yakutsk, produces 10,000 tons of coal a year for local industries. Other coal mines serve the Aldan gold fields.

An interesting undertaking has been scientific reindeer-breeding. Collective and government reindeer farms have been established, and every effort is being made to expand the herds so that reindeer may become the basic staple food as well as the main source of leather.

But reindeer are not the only livestock. In 1938, the Yakuts had 430,000 head of cattle and 180,000 horses.

Until 1941, Yakutia did not have a mile of railway. Then partial traffic was begun over completed sections of the Amur-Baikal line, which leaves the Trans-Siberian at Taishet, 270 miles east of Krasnoyarsk. Trains are now

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running from Taishet to the Yakutian port of Ust-Kut on the Lena river. From Ust-Kut a spur will be ultimately driven down the Lena valley to Yakutsk.

While the railway is being built, Yakutsk depends for surface transportation upon the Lena river and its tributaries—the Aldan, the Vilui, and other rivers—providing 6250 miles of navigable waterways from the interior to the Arctic Ocean. In summer steamboats ply out of Yakutsk up the Lena to Kirensk, a distance of 1100 miles. Kirensk is the transfer wharf for overland freight from the railway. Other ships go up the Aldan river to Tommot, or 922 miles down the river to Tiksii Bay, where they meet the Arctic steamers.

Commencing in 1933, ships from Murmansk and Archangel began to deliver goods from the European part of the Soviet Union at Tiksii Bay and to return loaded with products of Yakutia, especially lumber. Tiksii Bay has now become a well-equipped ocean port, providing Yakutia with an outlet by sea either to European Russia or, via Bering Strait, to lands bordering on the Pacific.

In 1929 the Amur-Yakutsk highway was built, connecting the town of Tommot, on the Aldan river, with the Trans-Siberian Railway station of Bolshoi Never near Chita. This all-weather route, passing through the center of the gold regions, has now been extended to Yakutsk. Another road, the Angara river highway, links the Lena river port of Kirensk with the city of Irkutsk. The total length of Yakutian highways exceeds 20,000 miles.

Passenger and mail airways have been in operation for more than ten years over the 1700-mile route from Irkutsk to Yakutsk. Since 1929, planes have been flown over the Lena river airway from Yakutsk to Tiksii Bay, which is also a terminal on the great northern airway reaching

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from Archangel to the Bering Strait along the entire northern coast of Soviet Asia. In summer, seaplanes and flying boats are commonly used; in winter, overland planes equipped with ski landing gear are in service. The Yakutsk Soviet has a squadron of airplanes used exclusively, as in Northern Canada, to maintain administrative contact throughout the vast territory. Scores of wireless stations have been erected to service the airways, and a powerful new radio station in Yakutsk maintains direct contact with Moscow.

The Yakut republic has progressed in communications, and to an even greater degree in culture. Under the Czars, although there were 141 schools, the 4000 pupils were mainly children of Czarist officials. Literacy among the Yakuts was less than two per cent. There was no Yakut alphabet. The situation changed rapidly after the founding of the republic. By 1940 there were 425 schools, attended by more than 66,000 children. Scores of technical schools trained skilled workers for industry. As in all educational institutions of the Soviet Union, the Russian language is taught together with the language of the nationality inhabiting the region. An alphabet has been created, so that students now study from textbooks printed in the Yakutian language. The teachers in isolated communities are the people's leaders, whereas in former times the exiles, as the most literate people in the community, were often also the local teachers as well as doctors. The republic today has native Yakut teachers and physicians. There are now more than 200 physicians and many hospitals, rest homes, and even vacation resorts.

In the field of entertainment, Yakutia boasts of 23 motion picture houses, 59 traveling "movie" shows, and four dramatic theatres, one of which is Yakutian, perform-

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ing plays by young Yakut dramatists. This Yakut Theatre of Drama, the first in the land, is located at the capital, which has grown during the past twenty years from 6000 to 42,000 people, and is still expanding.

The change undergone by Yakutia during the past two decades is well illustrated by the story of the aged collective farmer, Tatiania Yakovleva.

"I am now 90," she relates. "I have lived a very long time, but real life I first encountered only following the revolution, and especially after I joined the collective farm. My family and I were formerly slaves of officials, dukes, and kulaks. These parasites took from us everything that they needed for their idle life. Our children died before our very eyes, and we could not save them. Of my sixteen children only three survived. The other thirteen died of hunger, cold, and dirt. Neither my husband nor I had time to take care of our children. All of our time and all our strength was taken by the rich. First my husband ruined his health by overwork and died. My children and I were left in a terrible situation. I had to go through a lot of trouble and misfortune, much lowering of myself before others. With great difficulty I managed to save two daughters and a son. I am now a member of the Soljit collective farm. I live with my son, who is also a member. We live well. The prosperity of the collective farm and our personal income grow from year to year."*

In this manner the people of Yakutia, who were rapidly diminishing in number twenty-five years ago, have discovered the way to national revival. Much remains to be done to overcome the lingering backwardness and ignorance. But the "march of time" has begun.

* D. Bogorod, *Yakutskaia ASSR* (Moscow, 1939).

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8

The Siberian Arctic

A COASTLINE, SNOW-BLOWN AND ICEBOUND IN THE WINTER of the polar night, fogbound and moss-grown in the summer of the polar day—that is the coastline of the Siberian Arctic. Until a relatively recent date the Siberian Arctic, which embraces the vast territory of the lower valleys of the Ob, Yenisei and Lena rivers north of latitude 62° N., and sweeps across the north of Soviet Asia from the Yamal Peninsula to the Chukot headland, was the home only of northern nomads, of the polar bear, the lean plains wolf and the arctic fox, with civilized man a rare and curious visitor.

After the visits of explorers, new names would appear on the arctic map to record some discovery: Bering Strait in honor of Vitus Bering, a Dane in Russian employ; Cape Dezhnev at the northeastern land's end of Asia, named after its Cossack discoverer; Asia's northernmost Cape, Chelyushkin, rounded first by a Russian Baltic midshipman and not visited again for 140 years; the De Long Islands, located by an American, Captain George Washington De Long, and reached by man again after 56 years; Dickson Island, north of the Yenisei estuary, which takes its name from the Swede Oscar Dickson; and Franz Josef Land, christened by its discoverers, Weyprecht and Payer, to commemorate the Emperor who encouraged their expedition. Explorers came and went, and the arctic remained unchanged, a frozen, windswept, almost uninhabited tundra.

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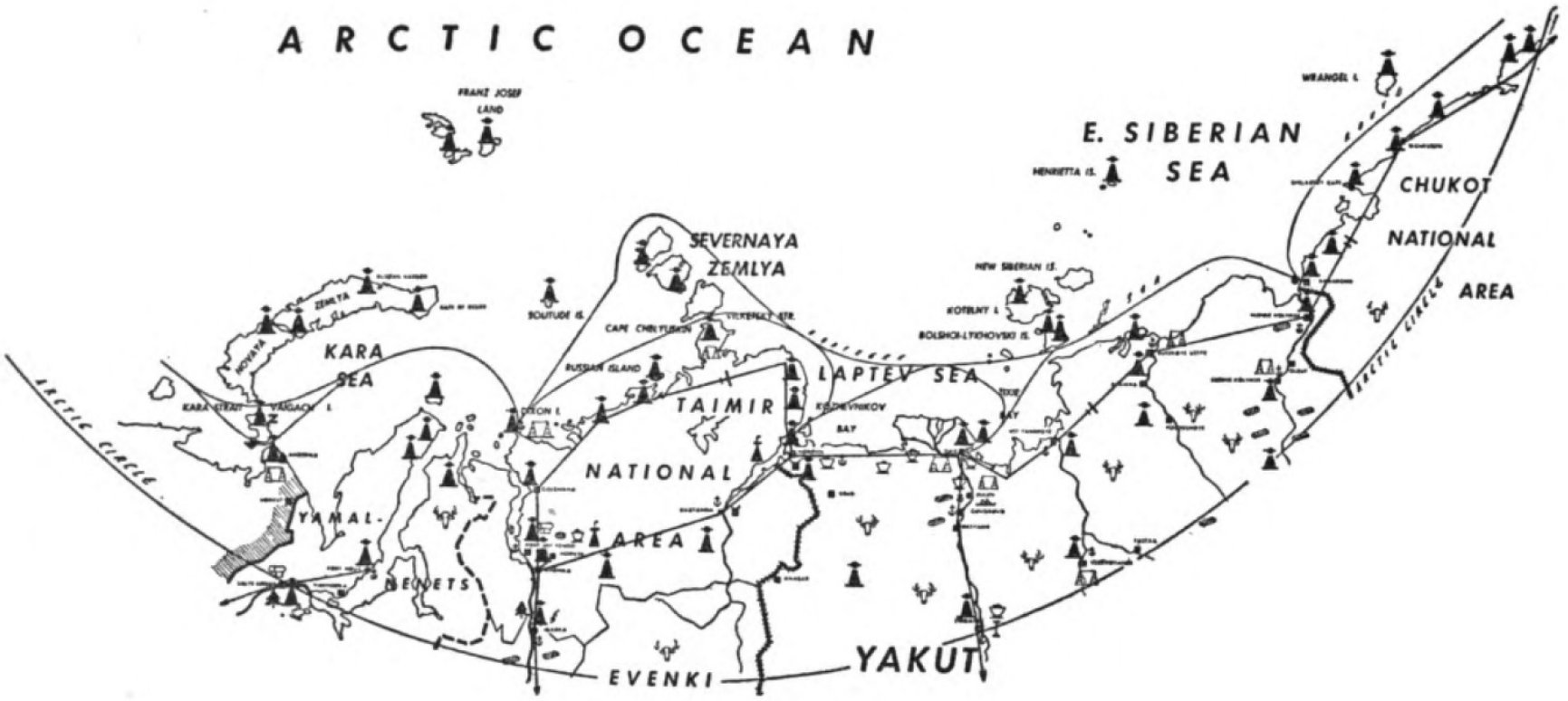

THE SIBERIAN ARCTIC

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Then, fifteen years ago, towns began to spring up along the coast at or near the mouths of the Siberian rivers, and the airplane, the radio, and the icebreaker began to open the Arctic to commerce and industry. Permanent polar research centers were established, seas were opened, and ports were built to accommodate ships. The arctic began to throb with human activity. We have seen it.

We reached the new port of Igarka after a six-day steamboat trip down the Yenisei from Krasnoyarsk. The site of the harbor had been chosen because it afforded a convenient place for river craft to transfer cargo to and from oceangoing vessels, which steam up the Yenisei from the Kara Sea, 420 miles to the north. When we arrived, there were eight large transports in the harbor: some from England, one from South Africa, the rest from Scandinavian countries. All had reached Igarka via the Northern Seaway: a week's voyage under icebreaker convoy from Murmansk; eleven days from London.

"Every year, the first glimpse of steamer smoke wafting across the broad river," said a fellow passenger, a resident of Igarka, "brings us a thrill of joy. For nine months the Arctic is closed by polar ice, and we don't see any big ships. During that time we stock the yards with sawn wood. And then, in early summer, one after the other the ships arrive! What a bustle and stir! Everybody goes down to the quay. . . ."

In the distance we could see Oregon timber carriers chugging up wooden roadways to lumber yards and rolling down again with load after load of the finest Siberian larch and pine to fill the waiting ships. The men on the docks were very busy.

"The town certainly looks big," we said, admiring the

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city that sprawled for four miles along the sheltered harbor.

"Yes, but you couldn't get lost in it," laughed the Igarkian. "Nevertheless, it has a population of 20,000, and Dawson City of Klondike fame had, in its heyday, only 10,000 inhabitants. Igarka is the largest town within 300 miles. Yet we're near to everything. We fly!"

That's the tempo of Igarka, a tempo of rapid growth. The first steps to build this port were taken in 1928. The ground was then covered with dwarf trees and tundra bush through which prowled bears, wolves, and polar fox. When, during the building of the town, two bears were killed in a ravine near the present quay, it was named Bear Hollow, and when some wolves were shot in another gully it was called Wolf Run.

Saw mills and an electric power plant to run them and light the city were erected. Sturdy log dwellings were put together for incoming settlers, and a water-supply system was installed. Roadways of sawdust and planking were laid across the tundra, and thousands of flowers and decorative shrubs were planted along the plank streets, and in parks.

We could not blame the Igarkian for being a "booster." As a seaport, Igarka offers the possibility for developing the whole northern and central portion of the Yenisei River basin, but it was not easy to construct the port, as Leonard Matters—then a British M.P.—wrote after a visit to Igarka in 1931:

"The shipping advantages—the deep, sheltered harbor—that determined the election of the site of Igarka were not without their drawbacks. Providing wharfage accommodations for the ships was the biggest problem. The great depth of the water along the river so close to the bank

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made it impossible for the engineers to build anything like a permanent quay. The longest timber piles would never touch solid bottom and leave enough of themselves above 35 to 40 feet of water to form a substantial wharf to which ships could moor. Even if they would, it is doubtful whether the ice movement and the raging flood in spring would permit a pile wharf to remain. A floating structure, of iron, concrete, or wood, is the solution to the problem. And the Soviet authorities at Igarka are satisfied for the moment to build such a floating wharf of logs. . . . Every season this floating wharf must be removed, for when the flood comes down, driving before it a battery of crashing ice, everything in its path is swept away."*

But a permanent quay was eventually built. To do so, surveys were made of the water in the river and the soil in the riverbed. Records were kept of the average water level during the August and September shipping season and during the spring flood. The earth under the river was found never to freeze.

Every day during the winters of 1934-1935 and 1935-1936, with the thermometer down to more than 40° below zero, workmen manned the pile drivers, mined the surface ice, drove steam needles 15 feet into the frozen river bank to thaw the ground, after which piling was driven for the trestle roadways of the dock approaches. The piles for the quay proper were of the longest and stoutest Siberian timber and were driven 25 feet into the unfrozen river bottom to anchor the quay. Then the piling was reinforced with rock ballast and covered with heavy wood planking. The work was done in winter, since at that

* Leonard Matters, *Through the Kara Sea* (London: Skiffington & Son, Ltd., 1932).

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season the water level is lowest. Ten days ahead of schedule —in February, 1936—a permanent quay half a mile long with seven mooring piers had been built.

When spring came that June, the Yenisei rose as usual 61 feet above its normal level, and when the "battery of crashing ice" went out there was no floating wharf to be swept along to sea. Instead 45 feet beneath the crest of the flood lay the anchored quay, ready to reappear late in July when the flood subsided and the river level was at the summer average.

When we went ashore we found lodgings in the Port Administration's two-story log dwelling, which also served as a hostel for the civil airlines pilots. We were introduced to an airman who had just flown in from Dudinka, 250 miles north of Igarka, and to another pilot who had just arrived from Krasnoyarsk, 1200 miles south of Igarka. From the latter we heard the story of Igarka's airlines:

"In 1931," we were told, "there was only one flying machine in Krasnoyarsk. That was mine. Now Igarka is connected with the territorial center by an airway along which scores of planes transport hundreds of passengers as well as tons of freight and mail each year. It used to take forty days by dog team to reach this point in winter, and it still takes six days by boat. But we fly it in six hours. Igarka is within the Arctic Circle, but to us it is merely a suburb of Krasnoyarsk."

That evening we went with some of the dockers to the International Seamen's Club, where a meeting was being held. When a young Russian woman finished speaking, a British seaman had a question to ask.

"Why do women work on the docks?" he wished to know. "It goes against the grain of an Englishman to see women doing such work."

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"We are not forced to do it," the girl answered, through an interpreter. "Women labor in industry because we want to help build up our country and to make it richer. Women work in the mills and on the docks because there are ships to be loaded. They are paid the same wages as men for similar work."

Another girl then addressed the meeting, saying she was going north to work as a radio operator at an outpost on an island in the Arctic Ocean.

"I'll be gone two years," she said, "but when I come back, I expect to be able to talk with you in English. I shall devote my spare time to mastering the language."

By the time the meeting was over it was midnight. We shook hands all around and stepped outside, expecting to walk home in the dark. The season was September, the twilight period, when it gets dark for two or three hours every night. To our surprise, it was a bright sunny morning. Igarka was on Moscow time, four hours ahead of local time, in order that the workers might listen to broadcasts at the same time as if they were living in Moscow. Thus, by going out for the evening we came home in the early dawn at midnight.

The next afternoon we were shown one of the city's really great sights, the Igarka experimental farm, on an island in the Yenisei. Our party included seamen from the ships in port and our guide was a woman agronomist. First we were taken to the potato plots, of which there were five.

"We are searching for the potato that will grow best here, in the vegetation period that lasts from 75 to 90 days," said our guide. "In one plot we vary the type of seed potato; in another the kind of fertilizer; in the

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third, the method of cultivation; in the fourth, the depth of planting, and in the fifth we test the frost-resistant quality of various potato plants. We carry out similar experiments with grain and other vegetables."

We saw acres of potatoes, onions, turnips, beets, wheat, barley, oats—all growing on land that had never been cultivated before. We were shown outdoor frames of lettuce, kohlrabi, spinach, and parsley, and saw greenhouses in which cucumbers and tomatoes were grown the year around. As we walked about the farm, our guide told us that one of her students had become the agronomist of Dickson Island, which is 500 miles farther north than Igarka.

"In summer there," she said, "they put a tarpaulin over the outdoor frames for eight hours daily. Without this artificial 'night,' root vegetables would get no rest from growing, no chance to develop tubers. We do the same here in midsummer. In winter, crops are grown in the underground hothouses of Dickson Island. They are heated and lighted by electricity, generated by the stiff gales that rotate wind-driven dynamo engines."

"Is Dickson Island the only place where there is hothouse gardening?" one of our party asked.

"No, they are generally found at our polar stations," she replied. "The constant winds of the Arctic—twice as strong as in the south—have made the hothouse possible, and so such gardens have been established at the new permanent centers, among them Providence Bay, Cape Wellen, Wrangel Island, Tiksii Bay, Cape Chelyushkin and Tranquility Bay in Franz Josef Land. That's our northernmost station, at latitude 81° N. It's the northernmost in the world, also."

"How do you get the structures there?"

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"The hothouses," she demonstrated, "have frames prefabricated from scrap metal, which are transported north during the summer shipping season. On some rocky islands even the soil has to be imported, and the agronomists at the stations are trained right here in Igarka or at the Khibin State Polar Farm, near Murmansk. That was founded before Igarka, and I was trained there."

By this time we had come to the stables, for Igarka's farm also had a dairy and herds of cattle, pigs and horses.

"The livestock are pastured in summer on the meadows that line the river valley," we were told, "and in winter they are fed with hay that has been grown in the summer. Livestock are very valuable, not only for milk and meat, but for the animal fertilizer they provide. Mineral fertilizer is not enough."

When we reached the berry patch and nascent orchard, we saw one of the farm's most interesting experiments. The orchard was not what we had imagined. The fruit trees—chiefly apples—were a bush variety, growing close to the moss-covered earth. In fact, the trees looked very much like the farm's arctic berry plants, and like the cranberry, gooseberry, currant, and blueberry bushes. Standing fruit trees do not survive the arctic winter, but are frozen to death above the snow cover. The wild arctic varieties of berry had been crossed with southern plants to produce a hardy, frost-resistant berry with a high vitamin content.

"But for the arctic berries and the eggs of arctic birds," our guide said, "the children would suffer from rickets, especially during the darkness of the arctic winter."

We saw a hive of bees that had been imported by airplane, an unusual way for a swarm of bees to descend from the sky onto a farm, and tasted some of their honey. It

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was delicious, an appetizer for the meal to which we were just then invited.

"Taste and eat the products of our arctic farm," our hostess said with a smile, and we sat down to what proved to be a four-square farm dinner.

First, we ate a salad of tomatoes, lettuce and cucumbers, next a large pork chop, with vegetables, and then, for dessert, strawberries as large as plums smothered in cream.

Among the British sailors was an Indian Moslem, who politely declined to eat the pork. Undismayed, the hostess offered him an extra helping of the relishing dessert.

This little scene terminated our visit to the farm. It revealed in a curious way how habits of mind follow one even to the Arctic. But the impact of variant cultures displayed was a mere episode compared to the epic conflicts of mind we discovered among the northern peoples.

The peoples of the Siberian Arctic number about a half million and, although divided into about thirty distinct ethnic groups, calling themselves the Nentsi, the Evenki, the Dolgans, the Tungus, the Luoravetlans, and so on (in each case the name usually being that particular group's native word for 'men' or 'people'), some have as few as one thousand members, and none has more than 15,000. In some places like the Taimyr peninsula, which is northeast of Igarka, 11,000 people inhabit an area as large as all the New England States together. This is now organized as the Taimyr National Area and, like the Evenki National Area, is part of Krasnoyarsk Territory. Other similar national areas are the Chukchee National Area in the peninsula opposite Alaska, the Nentsi National Area along the White Sea coast, and the Ostiak-Vogul National Area in the lower Ob river basin.

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Distance was formerly an effective barrier to social exchange and progress. Today, however, the natives are beginning to wake up to the fact that there is a world outside the tundras. In Igarka we visited a school that was helping the nomadic people of the north to find themselves in the modern world. While there we began an exploration of the native mind.

"Draw a locomotive for us," we asked one student, an Evenki, after we had gained his confidence. He fingered his pencil in silence, as though to focus familiar images and resolve them into a new pattern. He had never seen a railway train. Finally, he pursed his lips and began to draw a northern artist's conception of a locomotive. It was a paddle-wheel steamer on sledge runners.

This was not surprising. The side-wheeler was something he had seen in the harbor. A good sled was the pride of his clan. The idea of our young Evenki friend was entirely in keeping with what visual images he had of a locomotive, to him a cross between a sleigh and a steamboat. Not long before, another member of his tribe had invented a traction tread of walrus hide for a crawler truck after the arctic frost had cracked the rubber tread and rendered it useless, and another had invented a ten-ton trailer sled, with three runners, the middle of which served as a traction rod, to use with the crawler truck.

The Nentsi, who inhabit the northwest Siberian tundra, are identified by ethnographers as the Urgo-Samoyeds, who lived during the Bronze Age in the Minusinsk basin of the Upper Yenisei. They tilled the soil and were skilled in smelting ores, their copperware finding its way eastward to China and as far west as Hungary. A fifth-century Turko-Tatar invasion drove them northward. Research into the origins of the Finnic peoples brought the famous

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Finnish ethnographer, M. Castren, to visit the Samoyeds in the latter part of the nineteenth century. He travelled widely among them in the lower reaches of the Pechora, the Ob, and the Yenisei where he found them roaming the tundra with immense herds of reindeer, estimated at 40,000 head in the lower Pechora basin alone. They had forgotten the arts of smelting and tilling the soil. During the Siberian winter, when Castren was suffering terribly, they said it was "mild because no crows had been frozen to death."

Of the same stock as the Manchus, the Tungus people had a less fortunate destiny; when the first Manchu emperor mounted the Chinese throne in 1644 to found a famous dynasty, the Tungus people were being subjugated by the Cossacks. Comparing the Manchu and the Tungus people around 1877, Dr. Hartwig wrote: "Two hundred and fifty years ago, the former were still nomads, like their northern kinfolk, and could neither read nor write, yet now they have a rich literature, and their language is spoken at the court of Peking; while the Tungusi, oppressed and poverty-stricken, are still as ignorant as when they first encountered the Cossacks."*

Some of the ancient Asiatics seem to have found their way either across the Bering Strait or by way of the Aleutian Islands to North America. Dr. Aleš Hrdlička is convinced that this is how the American Indian arrived in America; he has stated that the Mongol of today resembles the American Indian so closely that if their clothing were the same even an anthropologist would be unable to differentiate between them by sight alone.† Today, Eskimos live on both sides of the Bering Strait.

Domestication of reindeer meant to nomads of the

* Dr. G. Hartwig, *The Polar and Tropical Worlds* (Chicago, 1877).
† *New York Times,* April 8, 1941.

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tundra what taming of the horse and cow meant to nomads of the steppes. There are authentic Chinese records to show that domesticated reindeer were fairly common in the north of China in the fifth century of our era. There is also a historical reference to the domestic reindeer of Norway by King Alfred of England in the latter part of the ninth century. Some authorities hold that domesticated reindeer originated in some intermediate part of Northern Asia.* Whatever the origin of domesticated reindeer, it is certain that for perhaps a thousand years the peoples who inhabit northern Asia have possessed reindeer. Chukchee, to name but one Siberian people, actually means "those rich in reindeer." But a native whom we met said he "preferred cows." When asked why, he answered, "They yield more milk and bring forth a calf once a year."

Across the whole of Northern Asia the peoples of the north for generations led a common mode of life as reindeer herders, but they were isolated in small, widely separated ethnic groups, centuries removed from the swiftly changing world.

In the tundra reindeer herding is a natural economy, and its value was early seen by the United States Department of the Interior after the acquisition of Alaska. The natives of Alaska did not have domesticated reindeer, and in 1892 arrangements were made with the Russian government to purchase Siberian reindeer, which were imported into Alaska. From the original herd of 1280 deer brought in during the decade after 1892 there have sprung the present several hundred thousand deer providing food and livelihood for Alaskan natives. Reindeer under proper

* Vilhjalmur Stefansson, *The Northward Course of Empire* (New York: The Macmillan Co., 1924), p. 117.

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care multiply rapidly. In the Siberian arctic the native peoples had an estimated 2,000,000 head in 1940.*

"The seasonal trek of the reindeer makes the people nomadic," said a Soviet woman veterinarian whom we visited in one of Igarka's two hospitals. With her husband, she had been engaged in the reindeer service of the Taimyr peninsula, where she had contracted anthrax from an infected animal. She had then been flown to Igarka for medical care.

"In spring," she continued, "the reindeer wander north to pasture in the open tundra, moss-grown and treeless, reaching from the timber line to the Arctic Ocean. The people follow their deer on the summer trek northward. Their individual herds range from 50 to 2000 deer. Tundra moss grows slowly. Years pass before it is rich for pasture, and when the herds pass over they may not return until the moss has again covered the grazing lands. From year to year the trek follows new paths, but ever it is northward in summer. In the fall, the reindeer return south to the forests, and there, beneath the trees where the snow is soft, they dig down with the hooves, nose up the snow, and graze on the moss beneath. In the winter the people also follow the deer to camp in the forests, where they trap fur-bearing animals as well. Thus the nomads move, season after season, year in and year out, always within the Arctic Circle, always bound to the deer. But we are trying to change that, and have already succeeded to a great extent."

"In what way?" we asked.

"Well, it is like this," she replied. "In our district of Volochanka the herds are owned in common. There are three collectives of deer people; not everybody follows

* Tass news agency, Oct. 15, 1940.

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the deer on the annual trek, only the best herdsmen do. Often we veterinarians go along; but the women and children remain in the settlement. In hunting it is likewise. The best hunters set the trap line, which is worked in common. In this way the people tend to settle around what used to be called the winter *stoibishche*, or nomad camp. At these centers, schools are built for the children, who formerly were born on the trek, lived to old age following the deer, and were buried somewhere along the way in the trackless wild. Today, the children go off to camp in summer, like the children in other lands. The first Pioneer camp for Dolgan children was founded in the Taimyr in 1938, and the party travelled to the camp in a train of canoes towed by a large whaleboat propelled by a gasoline engine. In the larger centers, like Igarka here, hospitals are built, and women now go to maternity homes during confinement.

"Hospital service has greatly improved. In 1913 there were 53 hospitals in all of Siberia, most of them not open to natives. But today we have more than 400 hospitals, open to all, in the Siberian Arctic alone. We already can see the benefits. The Nentsi, for example, who dwindled 71 per cent in the 35-year period from 1900 to 1935, have since shown a five per cent increase. That is true of the other peoples as well."

"In his book *Through Siberia, The Land of the Future,*" we recalled, "Fridtjof Nansen* gave a horrifying description of the old Turukhansk territory, which had only one doctor in an area almost as big as Norway. When an epidemic of smallpox broke out, the results, as he described them, were frightful."

* Fridtjof Nansen, *Through Siberia, The Land of the Future* (London: William Heinemann, 1914).

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"Yes, I have read Nansen and I know from firsthand experience how these people fear disease, and they dread it almost more in their herds than in themselves, for without their herds they are lost. But today our reindeer service helps the people to care for their deer on the trek. We have also established reindeer breeding farms. One is in my district of Volochanka, another at Potopova, and a third at Anadyr. Right here in Igarka there is a training center for the reindeer service, which is run at state expense."

Just then the physician on duty entered and the woman veterinarian smiled. "I'm afraid I've talked too much," she said. "One must obey doctor's orders, you know."

"Let's hope not, and that you may soon recover," we said, thanking her for the interview.

Later, we learned that the nomads are no longer entirely dependent on the reindeer for food. Groceries, fruits, and grain are imported from the south. And deerskin is no longer their only raiment. Cloth goods are brought to them, and many of them today are wearing leather and woolen jackets with zippers. Iron stoves, too, have played a role in revolutionizing eating habits; the people have learned how to cook their food. These goods are paid for by the hunters and deer people with cash they receive for the pelts and hides delivered to the state purchasing stores. The earnings of an expert hunter average around 13,000 rubles a year.* The entire northern trade, distributed through more than 4000 cooperative stores, and posts, was valued at 1600 million rubles in 1939. Certainly not a small amount for a sparsely populated area.

After one month in Igarka, we went up river for 250 miles to an old Siberian settlement called Turukhansk,

* *Dalnevostochina Zvezda,* May 11, 1938.

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the first town to be founded (1610) on the Yenisei by the Cossack invaders. Until the middle of the nineteenth century, it was a heavily garrisoned outpost much feared by the natives, for when the people did not deliver the fur tribute, a headman or chief would be seized and held for ransom until the furs were forthcoming. Then, the wealth of sable in the territory plundered, the garrison was abandoned. When visiting the place in 1875 the explorer Nordenskjöld wrote:

"It looks like a deserted village. The environs are boggy and have pools of stagnant water. A small church and lonely tower are the only structures worthy of mention. The others are small, neglected, abandoned huts. Yet the village has a post office, stores, and taverns."

When we arrived in Turukhansk, it was anything but deserted. Its population had risen from 200 to 1600, and there was a local theatre (in an abandoned church) where northern people were exhibiting their folk dances and music. There was also a library where, to our surprise, we found a copy of Milton's "Paradise Lost," a poem written in the century when the town was founded.

"Here's what Milton says about the River Ob," said the librarian, a young lad with eager eyes who could speak English. We thought he was going to say that Milton knew about the founding of Turukhansk. Instead, the librarian pointed to the passage where the fallen angel, Satan, after being banished from Heaven,

> ". . . then sought
> Where to lie hid; sea he had search'd, and land,
> From Eden over Pontus and the pool
> Mæotis, up beyond the river Ob;
> Downward as far antarctic . . ."*

* John Milton, *Paradise Lost,* Second Volume, Book IX, lines 75-79. London: John Sharpe, 1816.

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Then he told us that in Milton's day the seafarers of England and Holland had sought the hidden mouth of the River Ob, which legend described, and correctly, as a river rising in a lake of Western China. Although the West-European seafarers did not find the Ob, the Cossacks did, and thus reached Mangaseya, where they traded in early 1600 with the Chinese. From Mangaseya they went to Turukhansk.

"That's the lower Tunguska river," the librarian said pointing out the window to what appeared like an immense bay on the other side of the Yenisei. "Up that river eastward, the early Cossack traders found their way over the divide into the Lena river valley. Turukhansk was once the center of the Siberian world, but when Yakutsk was founded on the Lena, all of northeastern Siberia was ruled from there. From Turukhansk, also, the Cossacks went up the Yenisei to found both Yeniseisk and Krasnoyarsk, about 1628. Along Siberia's rivers you can reach the whole of the interior and every large inhabited point. But we fly these days. It's faster, and the mountains don't stand anywhere in the way. We just pass over them."

From the library we went back to the theatre, as it was time for the "show" to begin. The performance consisted of a motion picture and a one-act play performed by natives under the auspices of the Travelling Arctic Theatre. All subtitles and the sound track of the film were in the native language. Yet after the showing, one man went to the screen and peered behind it.

"What is he looking for?" we asked the director.

"He is trying to find out if a shaman is sitting behind the screen, pulling strings and moving the shadows about. Many of the older natives have an animistic view of the world. Spirits that only the shaman can control are be-

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lieved to bring man good and ill fortune, so when people become ill the shaman is called in to cure them."

A play entitled *Shaman*, written by a herdsman, was now begun. It proved to be an adaptation of a folk song about a hired man Syro, his wife, their employer, a rich reindeer owner named Yangut, and a shaman. Syro and his wife tended the fat herds of their master, but received for their food only the meatless bones thrown out by the owner. Irked by his joyless life, Syro attempted to leave Yangut and join up with some tundra people who owned many reindeer together (a collective). But Syro fell ill and asked the master for a doctor. Yangut deceived his hireling by bringing in a shaman, who persuaded Syro that in order to regain his health he must give him an offering of three reindeer, a fox skin, and felt boots, almost the whole of his possessions. Syro refuses and grows worse. Then his wife steps in, and, on the advice of members of a collective deer ranch, she goes to fetch a Soviet physician, who arrives by airplane just in time to restore Syro to health. Exposed as a quack, the predatory shaman is driven away.

As part of the evening's program there was music: a piano and several string instruments. The tom-tom, usually associated with native music, was used only as a tool of the shaman. The director told us that many musical instruments were imported into the Siberian Arctic. From trade statistics we later learned that 18 pianos, 77 violins, 1457 guitars, 500 mandolins, six sets of brass band instruments, and 4279 phonographs were brought into the north in 1938 alone.*

"These people are very fond of music and of the drama," the director went on to explain," and our travelling theatre makes annual trips up and down the Siberian rivers, stop-

* *Literaturnaia Gazeta*, May 31, 1938.

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ping at each town to give performances. Sometimes we present concerts on board ships or over the radio, and once, in 1937, we broadcast a program from Dickson Island to the North Pole arctic station. We who have been trained in Moscow theatres assist the native artists in putting on their shows. I myself used to be with our oldest theatre of drama, the Malii Theatre in Moscow. When the Arctic was opened, a group of actors was called in by the Northern Sea Route Administration to form the Arctic Travelling Theatre. We have a repertoire of modern and classic plays by Ostrovsky, Gogol, Molière, and many others. One of the most popular is Molière's satire *Tartuffe*. The natives get the point readily and begin to ridicule their own shaman."

"In Igarka," we told him, "we saw your performance at the city theatre. But we are even more interested in what you are doing here and further north."

"Yes, we helped to found the theatre in Igarka and the one here," said the director. "But the whole story of what we do among the peoples of the north is a long one. If you'll bear with me, I'll tell it briefly. When our explorers first went north with thermometers, aneroids, and barometers to study the weather, they found themselves among people like the Chukchee hunters who, to increase the season's catch, erected magic boards inscribed with images of the walrus and the seal. The people themselves were almost like museum exhibits, and their encampments alongside the new polar stations, where direction finders, radio beacons, weather charts, and other modern tools are standard equipment, provided a living contrast between the stone and the airplane age.*

* Cf. Andrew J. Steiger, "Stone Age People in the Age of the Airplane," *Pacific Affairs*, June, 1941.

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"Then the Institute of the Peoples of the North was founded in 1926, in Leningrad. The first students, from every part of the Arctic, came dressed in deerskins. Nomads from the Chukot Peninsula met nomads from the Taimyr and Kola Peninsulas for the first time and discovered that they had common interests, but spoke different languages, none of which had an alphabet. These first students helped to prepare 16 alphabets for printing primers, and where there were no words for steamship, locomotive, airplane, coal mine, mill, and so on, these words were invented in the various languages. The primers were used in founding elementary schools among the nomads in the tundra, and the schools during the next ten or twelve years made such progress that by 1938, every student in the entering class of 200 in the Leningrad Institute (known to the northern people now as the 'Tent of Miracles') had had at least four years of elementary schooling."

In the "Tent of Miracles," as we later learned, the students are encouraged to write down the oral folk songs circulated among the people by their own bards. Along with old legends, many new songs have spontaneously come into being, and some of them blend motives both from the old and the new era in the lives of the people. The work of collecting and printing these folk songs is also carried out by folklorists and teachers who travel among the northern peoples. One of these new songs is "Song of the Sun Regained," first recorded by a young teacher among the Saame people. The Saame tribe is ethnologically related to the Finnic peoples, whose *Kalevala* is the origin of Longfellow's *Hiawatha*. The first part of the song describes a crafty swindler, using firewater and trinkets to corrupt Chikailo, the chief, into gambling away not only furs of the tribe, but also the sun, to the ruin

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of his people on whom a long darkness descends. The second and third parts tell the story of the regaining of the sun. Czarism symbolizes the long winter night, while Soviet power is the long summer day when the sun returns again to the tundra. The concluding verses read:

"All your lives you've longed for sunlight,"
Stalin said to the Saame,
"Take this sun, I give it to you.
Henceforth may it cross the tundra
Once a day to bring you sunshine,
Warm your camps, your tents of deerskin."

Then he started home to Moscow,
Crossed the tundra and the mountains,
Where he trod he left his footprints,
Every footprint a new city,
Here a bridge and there a railway.
Where the Khibin wooded mountain
Rears up lonely in the tundra,
By the lovely lake Immandra,
There is now a wonder city.

Thus he crossed the Soviet country,
Friend and leader of all peoples,
Everywhere he left his footprints,
Cities rose with clifflike buildings.

To our friend and leader, Stalin,
We, the herdsmen in collectives,
Sing a song of joy and labor,
Of the new sun in the tundra.*

Old men are still to be found who ask: "Why learn

* *Pesni Narodov Dalnevo Severa* (An Anthology of Songs of the Peoples of the Far North), Leningrad, 1935.

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reading and writing? Have we lost our tongues? Have we forgotten how to speak?" But it is not hard to convince them that it is a good thing to allow the children to go to school, and the youth, though still somewhat bewildered, are eager to adopt modern customs. Nikolai Tarbukin, an Even (or Lamut) poet inquires wonderingly: "Am I really a bird?" because, he says,

> "I fly like an eagle as far as the sky is open.
> I send from aloft my salute to the earth.
> Drive on my sleigh reindeer, my aerial reindeer,
> For I have become now a son of the clouds."*

He was first encouraged to write when a student at the "Tent of Miracles" in Leningrad, where one can also find other artistic work expressive of a people in transition, passing from a primitive to an industrial civilization. Like all hunting peoples, the northern natives are deft at pictorial art, as were the American Indians with their picture writing. At the institute they learn to paint in oils, but their best themes remain the tundra landscape. So entitled, one painting is on exhibit in the Institute's foyer.

Bone and ivory carving is perhaps the most typical expression of northern art. Snuff boxes, hair ornaments, chessmen, drinking cups, and vases with tracings delicate as lace, carved by the craftsmen of the Russian north were highly prized as long ago as the eighteenth century, when Europe imported practically all its ivory from Russia and Siberia. Much of this ivory was mined as fossil ivory; the tusks of extinct mammoths buried in the frozen subsoil of northern Asia. The most famous of the ivory deposits are those of the New Siberian Islands north of the Lena delta, discovered in 1806. One record tells us that here in one

* *Sever Poet* (Poems by poets of northern peoples), Leningrad, 1939.

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year alone (1812) twenty thousand pounds of fossil ivory were recovered. But mammoth tusks are not the only source of material for the bone-carvers. Walrus tusks are used to an even greater degree. The native bone-carvers have better tools, of course, than had their forefathers, not the least of which is an American steel file, esteemed so highly that the Chukchee word for "American" is the word meaning "those with files." The best carvings are those of reindeer and sleigh.

Colorful needlework on suede, embroidered with the white hairs of the deer's dewlap, is a folk art in which the women excel, which is more widely practised than ever before, since they are now less nomadic and have more time for needlework in their more settled existence.

But the natives are skilled not only in folk art; many are being trained in the mechanical arts: as meteorologists, wireless operators, truck drivers, air mechanics, store clerks, and even as airplane pilots.

Not far from the theatre in Turukhansk is an old-fashioned log house with a wooden slab nailed to the wall reading: "Here Y. M. Sverdlov, first President of the Russian Soviet Federative Socialist Republic, lived in exile." Inside there were mementos of Sverdlov's life, but what is more interesting was the equipment of a modern meteorological station.

"What does the weather man say today?" we asked of the young meteorologist in charge.

"Fair and warmer," was his cheerful reply. "I just sent out a go-ahead signal to airmen who had been waiting out a storm down the line. They always query us before taking off from Igarka or Dickson Island. It keeps the radio operator busy."

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"We've heard a lot about your weather service in Siberia," we said. "Even Alaska makes use of your reports, and they also help to forecast flying weather in the North Atlantic. These instruments make one feel like a babe in the woods."

"It's all quite simple," he said.

"A mere routine job, to you, no doubt?"

"Oh, sure. We measure temperature, wind velocity, cloud formations, and solar radiation, and send up balloons regularly to sound the upper air because stratospheric observations are quite important for high level arctic flying. We take our measurements at fixed hours every day and radio reports on local weather to the big center on Dickson Island, which collects the reports from the stations in the Yenisei area. Dickson Island is one of the five key stations. The others are Tiksii Bay, Cape Chelyushkin, Anadyr, and Amderma. Through these five key stations, which have both forecasters and observers, the collated weather reports are radioed daily to the Central Meteorological Service in Moscow."

"Do you also service the icebreakers?"

"Not directly, because Turukhansk is some distance inland from the Arctic Ocean. But ice movements are studied just as precisely as the atmosphere is studied. Resident hydrologists are located at our sixty permanent polar research stations along the entire northern coast and on remote islands in the Arctic seas. The winds play a large part in the direction and speed of drifting ice floes. We discovered that when four of our famous explorers led by Ivan Papanin lived for nine months on an ice floe which drifted from the North Pole to the Greenland Sea. If you look on the map, you can see the zigzag line of their long drift.

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"The polar pack drifts northwest across the whole of the polar basin, from the Bering Strait to the Greenland Sea, and into the North Atlantic, there to lose itself in warm waters. Nansen drifted across the entire polar basin in the *Fram*, and while the general direction of his three-year drift was northwest, the line of the drift when plotted on a map shows many zigzags and loops, like those of our North Pole drifting station. The pack movement determines the general direction of the ice-floe drift, but the wind stress shifts the floes about in a surprising manner. So our study of the winds helps the men who forecast ice movements. We help them in another way, too.

"The Yenisei river empties billions of cubic yards of warm fresh water into the Arctic Ocean every year. Sometimes we're able to determine, after recording the amount of water poured out during the spring flood, just about where the ice will be in July in the Kara Sea. Our studies of the spring flood give an approximate forecast of ice conditions to be met by the first ships coming into the sea in summer. The forecasts are becoming more accurate year by year, for our studies of the fluctuating river level are correlated with the observations made by explorers in hydrological survey boats, which chart the extent to which the Yenisei, Ob, and Lena rivers force the ice to recede northward from the Siberian coast in summer, as well as the currents they set up in the Arctic Ocean.

"Old explorers used to call the Kara Sea an 'ice cellar' because the ice seemed to collect there and stand in the way of ships. We have found out just how the ice does 'stand,' that is, we have learned the shape of the moving ice fields.

"Then again, our local weather reports are useful to the ice-patrol pilots who fly ahead to guide icebreakers. These pilots survey the ice fields day by day, looking for

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channels easily penetrated by ships. Some of the pilots fly as many as 20,000 miles over sea ice during a summer.* In the old days, there was no aerial patrol, and ships sometimes became icebound when, just ten miles off their course, would be open water that could have been easily navigated had the skipper known of its existence in time to reach it.

"To send out all our reports we, like other arctic stations, use electric power generated by wind-driven dynamo engines. As many as a million and a half words are handled annually, for instance, by the radio station on Dickson Island. The radio makes a *zimovka* bearable and we never feel lonely even when there are only two or three of us at a station. I recall one *zimovka* I spent on Matochkin Shar, at the eastern end of the strait that cuts Novaya Zemlya into two islands. One cold blustery night the meteorologist went out to make the routine weather observations in the booth where we kept the instruments, about a dozen yards from the hut. He never came back. We could not find him, and the blinding blizzard lasted for six days. We dug him out later from a snowdrift, frozen stiff. After that no one ever went out in a blizzard without first tying a rope around himself and hitching the loose end to the doorpost."

"What do you mean by *zimovka*?" we asked.

"*Zimovka?*" he said. "Why, a *zimovka* means spending the winter in the arctic. It is like the hibernation of bears, except that the bears sleep out the winter, whereas we work it out. Most of the managers of polar stations are veterans, all with more than one *zimovka* in the north. Ernst Krenkel has had as many as fifteen as the head of

* During 1939 ice-patrol pilots flew 2000 hours over sea ice ahead of convoys, covering a total of 1,200,000 miles. Tass, Oct. 15, 1939.

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the Polar Station Department of the Northern Sea Route."

"In what kind of house do you spend the *zimovka*?" we asked.

"Not in igloos or snowhouses. We live in strongly built frame houses. Of the prefabricated type, they are brought in by icebreaker and erected on the bleak arctic islands. Some stations have just a single house on an icy, rock-bound coast, fog-ridden in summer, snow-blown and dark in winter. Other stations have many buildings. Thus, Wrangel Island has a residence for its staff of 16, a radio station, school, bathhouse and metal-frame hothouse for vegetable gardening. Cape Chelyushkin is a similar place, but Dickson Island is larger, with scores of buildings and new ones going up. The resident staffs of polar stations vary from three to sixty persons. At places like Dickson Island and Tiksii Bay where there are also ports, the population is considerably more."

"It must be a dreary life!"

"No, because we are never out of touch with the outside. For instance, I have just received a letter from a friend on Russkii Island, off the bleak Taimyr coast. 'Our big dwelling,' he tells me, 'is now completed to suit everybody. It has ten rooms: a radio booth, meteorological room, machine shop, five private living rooms, a wardroom for meals and recreation, and a kitchen. Our bathhouse is big enough for twelve persons. We are only six, and it's quite a job to heat up the bath for each one separately. So we have a common bath night when everybody goes together.' "

"A good old-fashioned Saturday night!" we suggested.

"The bath is a real institution in the north, you can be sure, and when northern natives first emerge from some of the portable baths that we send out, they're all steamed up and with lather rinsed off look from starry eyes on the

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new world about them. But to get on with my friend's letter. 'In our wardroom we have a phonograph, radio, guitar, two mandolins, two balalaikas, a dining-room table with a clean white cloth, a writing desk, and about two thousand books. Fresh flowers and palms have now been cultivated indoors during two *zimovkas* and decorate our living room. We have several cameras among us and a darkroom for developing films. I wish you could see our pictures! The other day we took one of Polly. She's been at the station now for three *zimovkas* and doesn't seem to mind the northern climate. Our wireless station gets power from a dynamo engine.

" 'In our spare time we go out hunting. This past winter we caught 37 arctic foxes, and killed six polar bears. We had to kill the bears because, smelling our food, they would prowl into camp and one even got into the storehouse. It was a sorry mess. But the fresh bear meat tasted fine.

" 'Last May, early, the birds flew north. The first among them, a messenger of spring, was the snow bunting. Soon afterward came the ivory gulls, stormy petrels, guillemots, geese, and eider ducks. We like the eider ducks best, and ungraciously rob their nests of down. Do you blame us: We can make such good use of eider down, the warmest material known. All the birds build nests and raise young on the island. Most of them build solitary nests. Only the ivory gulls congregate in small rookeries of 60 to 100 birds. And now that summer is nearing its end, some of the birds are already flying away to the south. The ivory gulls are last to leave. And with them will go the last of the flowers: the arctic poppies and the violets that appeared with the first thaw. They always perish in the first frosts. It is hard to see them go and to know that

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soon, when the snow has covered the bare rocks, our island will look like some rugged mountain peak of the Pamirs.' "

"That doesn't sound like a very attractive outlook. It takes fortitude."

"There is no doubt about that, but we are too busy to philosophize. . . ."

"Who is the Polly that your friend mentioned?"

"Oh," the meteorologist laughed. "Well, there are women at our polar stations, also. In one station the women fulfilled their plan 100 per cent, while the men carried out their designs only four per cent. You are puzzled? Well, it was this way: the station had two women and fifty men. Both women were married during one *zimovka*. In another station, there were two men and one woman, with a child. The child outgrew his swinging crib during two *zimovkas*. A new crib was made of driftwood. He became very strong in the healthy germfree Arctic. But—Polly is a yellow-plumed mockingbird, the mascot of the station. Many stations have such mascots, usually the lean Siberian *Laika* or Eskimo dog. At one station there were ten dogs at the beginning of the *zimovka* and twenty at the end. On the ice floe with Papanin and his three comrades was Jolly, a terrier who was up to mischief during the whole *zimovka*. Even pigs are raised at some stations, though usually not as pets."

"That sounds like life in our own backyard," we laughed, "instead of the kind of Arctic we've been accustomed to."

"You mean to say you've lived in the Arctic?"

"Oh, no! That was a slip of the tongue. We mean that we've always considered the Arctic as one of the last places on earth and the least desirable for human habitation. But you people seem to enjoy living this way."

"Yes, we do like this new Arctic. It's so different that we

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find it hard to realize what it was before, a very lonely place for the rare explorer. We are kept too busy to be lonesome, and now I see it's eight bells, time I went out to read the instruments. In ten minutes I must wireless the weather report to Dickson Island. I hope you will excuse me?"

"Indeed, we will! We're sorry if we have interfered with your work."

"Not at all. We're always glad to meet new people and see new faces."

We then parted, going outdoors and down through the town to the wharf. There we boarded the steamboat that took us up the Yenisei to Krasnoyarsk, where we resumed our journey on the Trans-Siberian. We spent about ten days aboard a Yenisei river steamboat, slowly puffing up the long river to the wharf at Krasnoyarsk. There was ample time for reflection about our brief day's stopover at Turukhansk and our month's stay at Igarka. We had seen the new outposts in the Siberian Arctic, had talked with the people working there, but the full import of what was happening did not dawn on us until some years had passed, when we were back in America. Then we recalled what Professor Otto Y. Schmidt, head of the Northern Sea Route Administration, said: "The opening up of Northern Russia is comparable in importance to the opening up of America."

The big push that sent these arctic pioneers north to live both during the brief arctic summer of continuous sunshine and during the *zimovka* of a total arctic night, was the opening of the northern seaway across the top of the world. Without the strenuous, unceasing labor of these pioneers, the great northern seaway that joins the Atlantic to the Pacific around the north of Eurasia would still be a dream. Instead it is a most substantial reality.

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9

Seaway Across the Top of the World

"YOU SEE, THE ICE IS OUR FRIEND," SAID CAPTAIN MAKAROV, of the ice-breaker *Krassin* when she docked at Seattle, on November 16, 1941, after a voyage from Atlantic waters north of the White Sea to the Pacific Ocean. "We can hide in the ice, if nothing else. There isn't a warship commander afloat who would dare follow us in."*

To reach Seattle the *Krassin* had sailed across the top of the world via the Northern Sea Route, which is of great importance in the grand strategy of the United Nations. Under ice-breaker convoy, ships may pass through it from the North Atlantic to the North Pacific, and vice versa, thereby linking the Pacific with the European front. It is just 6,000 miles from Seattle to Archangel,† or from Murmansk to Vladivostok by this route through "friendly ice," and throughout the coming summer ships loaded with war supplies for the "front" or with raw materials from the Soviet Union for the United States and Canada will be traversing it.

This use of the northern seaway was foreseen. "There now seems to be no reason," wrote the famous explorer Vilhjalmur Stefansson in 1937, "why, in case of a national emergency, such as for instance, a war in the Pacific, it would not be possible to send 24,000,000 tons around the north coast of Asia next year (1938) by the same process that took 24,000 tons through that passage last year (1936).‡

* *New York Times,* Nov. 17, 1941.

† *Russia at War,* Bulletin on the Soviet Union, New York, Feb. 28, 1942.

‡ *Research Bulletin on the Soviet Union,* American-Russian Institute, New York, August 30, 1937.

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A month or so before the *Krassin* arrived in Seattle, the British radio (recorded at the Columbia Broadcasting System's short-wave listening station) reported that an all-winter shipping service between Seattle and Archangel would be established.* And when the *Krassin* had actually docked, the *New York Times* commented: "The Northwest Passage around the world and back to Europe has always existed. But for three centuries frustrated explorers failed to find it. Cabot, Hudson, and Frobisher all thought that there must be some opening from the North Atlantic, but the gods of chance were against them. The only navigable route led through another ocean on the other side of a continent. When Captain Cook sailed into the Pacific in the year of our independence and pushed into the Bering Strait, he was probing toward it. But it remained for the Russians to open it up in our own day. The Soviet icebreaker *Krassin* has just traversed it, all the way from the White Sea through the obscure channels north of Siberia, and is now lying at a Seattle dock. Her presence in an American port shows that the waters of arctic Asia are navigable to a stout ship with the right pilot and the proper charts. It would be surprising if she did not take back supplies for Russia's war."†

The passage through the Soviet arctic seas offers protection to shipping along the coast of Siberia. Through it merchant ships under ice-breaker convoy can pass around the world by stages and with full bottoms all the way.

Development of arctic shipping in Soviet Asia has been integrated with the expansion of industry in the whole of the Soviet Union. The arctic contingent of the First and Second Five Year Plans was the Northern Sea Route Administration, a far-flung organization that was established

* *New York Times,* Sept. 27, 1941.
† *New York Times,* Nov. 23, 1941.

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in 1932 and empowered to exercise state authority within a domain embracing all Soviet territory north of latitude 62° N., or in two-fifths of the aggregate area of the Soviet Union. Chief of this polar dominion was Professor (now Academician) Otto Y. Schmidt, called the "Ice Commissar" or "Ice Admiral" by journalists who found the full-bearded, venerable explorer a picturesque figure. During the period from 1932 to 1937 long-term investments totalling nearly $100,000,000 were made in promoting the work of the Administration, which had about forty thousand employees, a fact dramatized by H. P. Smolka in his book *40,000 Against the Arctic.**

The Administration supervised exploration, shipping, airways, trade, industry, fishing, education, and medical services; in short, everything in the Soviet Far North.

The period following the setting up of the Northern Sea Route Administration saw a great expansion, orderly on the whole, but not always well-managed in detail. Big enterprises were the North Pole Expedition, flights to America, the establishment of more than half a hundred polar stations, the opening of Siberian rivers, the rise of arctic industries, the building of many seaports. These undertakings so aroused the admiration of the world that there was a tendency to overlook such important shortcomings as icebound ships requiring expensive salvage operations, mismanaged shipping, and high freight charges.

But that there was deliberate wrecking within the Administration began to be suspected, though it was not proved and exposed until the Moscow Treason Trials of 1938, when S. Bergavinov, head of the Administration's Political Department, was exposed as an accomplice with General Gamarnik in a plot to assassinate Stalin as one

* H. P. Smolka, *40,000 Against the Arctic*, New York: Morrow, 1937.

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move in a planned "palace coup" by which high-ranking Red Army officers were to seize power in the Kremlin. The plot had been aborted when several Red Army generals were executed in June, 1937; only during the 1938 trial were the full details of the conspiracy revealed.

The summer of 1937 had been one of outstanding achievement for the Administration. Four explorers—Papanin, Krenkel, Shirshov and Feodorov—had landed on an ice floe at the North Pole intending to drift to the Greenland sea.* Two transpolar flights to America had been successful. The third, however, had been a failure. The airmen and the plane, piloted by Sigismund Levanevsky, were lost between the North Pole and Alaska. Nothing has been heard of them since. At a sabotage trial, in 1938, of a radio operator, evidence pointing to an attempt at deliberate wrecking of the Levanevsky flight was presented.

This unsavory fact, coupled with the circumstance that almost the entire icebreaker fleet had been left icebound through the winter of 1937-1938, imperilling the shipping program of 1938, brought about a reorganization of the Administration. The four men who carried through the North Pole Expedition were given high posts in the new setup. Ivan Papanin became chief of the Northern Sea Route Administration, and the Administration was reorganized.

As set forth in the Third Five Year Plan (1937-1942) the task of the reorganized Administration was to make the Northern Sea Route a dependable waterway for scheduled shipping between European Russia and Far Eastern Siberia. The functions of the Administration were pruned so that it became essentially a transport organization, responsible for safe conduct of arctic convoys but not for

* Ivan Papanin, *Life on an Ice Floe,* New York: Julian Messner, 1939.

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supervision of education, medical services, trade, and local arctic industry, except when ancillary to the Sea Route's work. Thus, it continues to control northern exploration and to promote coal mining in the arctic regions for fuelling ships, but functions administratively only in the arctic islands, in Chukotia and in the far north of Yakutia, and there only in so far as trade and the fur economy are concerned. In the Far North of European Russia and of the Ob and Yenisei basins, administration of all enterprises except sea transport is either under local soviets or under respective union commissariats.

The Soviet Union has never had the plan, as we once heard Prof. Otto Schmidt explain (in 1936) to students of the Moscow University, of maintaining permanently an arctic dominion separate from the rest of the Union. Its object has always been to reclaim these vast wastelands and to make them as much like the rest of the country as possible. In accord with the furtherance of this policy, enterprises not directly associated with shipping, such as the educational and medical services, were transferred in 1938 to the commissariats of education and health. In that year, also, almost two-thirds of the arctic airways were transferred to the control of the Civil Air Fleet Administration, a national organization.

Formerly a large part of the freight destined for northern Yakutia was carried from Moscow to Irkutsk over the Trans-Siberian railway, thence by motor truck to the headwaters of the Lena, and down this river by raft and barge. Other shipments went by rail past Irkutsk all the way to Vladivostok, there to be reloaded on cargo vessels for shipment north via the Bering Strait and westward along the seaway to the mouths of the Kolyma, Yana, Indigirka and Lena rivers. Today, cargoes go direct from European

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Russia by way of Murmansk and Archangel, eastward through the Northern Sea Route to Yakutia, reaching their destination in two months instead of six months, and at less cost. This has lifted a burden of many thousands of tons of freight annually from the Trans-Siberian Railway.

At one time Tiksii Bay, at the mouth of the Lena River, was a transfer point for cargo consigned farther east to the Yana and Indigirka river regions. The long haul of 2050 miles from Murmansk cost 230 rubles a ton, and the short haul of 180 miles from Tiksii Bay to the Yana river mouth cost 200 rubles a ton. Added to this was a high rate for transfer shipments out of Tiksii Bay to the mouths of the Indigirka, Yana, and Anabar rivers. It therefore became necessary to arrange for direct shipment from Murmansk to the mouths of these rivers. This has been arranged, but the system works well only where the local station has a large freight turnover.

A different delivery plan has been introduced for stations having a freight transfer of less than 100 tons. In Novaya Zemlya, for instance, shipments are made to twenty-one points: five of which are fairly large. Formerly 1200-ton cargo vessels called at each point, sometimes requiring days to unload a few tons. At present the large centers serve as transfer ports, out of which operate small vessels of 200 and 300 tons capacity. Local coastwise shipping is done by small boats. Along the Chukot coast, where there are many villages of fishermen, one 500-ton coastwise schooner can handle up to 5000 tons of cargo during the 100-day shipping season at less cost than could a 5000 ton freighter, which is thus freed to go back at once with cargoes of timber, minerals and furs. Ships must move

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fast through arctic waters, for the navigation season is limited to the brief summer months.

The main ports—Dickson Island, Kozhevnikov Bay, Tiksii Bay, Ambarchik, Providence Bay—are being mechanized to speed up the "turn-around" of arctic ships. Dock conveyors, coal bunkering booms, narrow-gauge port railways, and travelling belt loaders have been installed. To minimize delay still further, oil tankers, water tenders, and coal barges are being added to the harbor fleets. The program calls for ships to remain in port four to five days instead of ten or twelve.

Formerly the arctic fleet was fueled to a large extent by Donbass coal, a circumstance which, if still true in 1941, would have wrecked the shipping plan. But in 1940 Ivan Papanin announced that the arctic fleet was being operated entirely on arctic-mined coal.* The arctic coal mines are to produce 1,500,000 tons in 1942.†

As a result of all these new measures in coaling, docking, and delivery the freight turnover has risen immensely; as much as 2700 per cent, for instance, along the Kolyma River, during the five-year period 1932-1937, and it has shown a steady increase since. In 1933, two freighters steamed from Murmansk to the Lena delta at Tiksii Bay but had to spend the winter near Tiksii Bay. Seven years later (1940) ten freighters were convoyed through to the Lena river so expeditiously that all were able to leave the Arctic before the freeze-up. One new vessel, the *Dickson*, reached Tiksii Bay on her maiden voyage and returned to Murmansk, then went on a second round-trip voyage east to Port Igarka in the same season. All ships are moved under icebreaker convoy supported by aerial reconnaisance.

* *Sovietskaia Arktika*, No. 5, 1940, p. 6.
† *Sovietskaia Arktika*, No. 6, 1939, pp. 25-31.

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Freight shipments from 1933 to 1938 aggregated more than a million tons. In the Kara Sea the 1938 haulage was 240,000 tons, or five times the total tonnage carried there in the 44 years between 1876 and 1919. Freight shipments in 1939 were reported as double those of 1938.

Forty of the Soviet arctic fleet of 100 vessels are icebreakers, some being classed as icebreaker steamers since they are used as transports to arctic islands and can travel without icebreaker escort. The grand ships of the line are the big icebreakers. There are ten or more of these, including the old 10,000-ton *Krassin*, the new *J. Stalin* of 11,000 tons, commissioned in 1938 and first used in the convoy service during the 1939 shipping season, the *L. Kaganovich*, and the *V. Molotov*.

In addition to new icebreakers, Soviet shipbuilders are building new freighters for arctic transport, vessels of 10,000 tons and more. Powered by two 7,200-h.p. Diesel engines, the new ships will make the round trip from Murmansk to Providence Bay, in Bering Sea, without refueling. An even larger transport of 16,000 tons, with a cruising radius of 7,500 miles, was projected before the outbreak of war. Likewise super icebreakers of 50,000 horsepower and 24,000 tons displacement are being discussed in order to cope with demands on wartime shipping between the Soviet Far East and European Russia, and between America and Canada and Russia.

As they tell it along the Yenisei, commercial navigation in the northern seaway began long ago. A memorable day was the launching of the *Utrennaya Zarya* (Morning Daybreak), a steam yacht built years before the erection of the Krasnoyarsk bridge in 1900. Siberian natives built the *Utrennaya Zarya* and hoped, as her name implied, that she

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would herald a new day along the Yenisei. The bold dreamers sailed her down the great river to Kara Sea, passed through Vaigach Strait to the Barents Sea, skirted the Scandinavian Peninsula, actually reached St. Petersburg, via the Baltic, and rejoiced in their handiwork. But a cold reception awaited them. Two of the crew were arrested by Kronstadt police as runaway exiles. The feat had caused a sensation in Norway and England, but official Petersburg frowned on Siberia and the Kara Sea passage to the Yenisei.

Then along came Stepan O. Makarov, vice-admiral of the Baltic Navy and lecturer at the Kronstadt Naval College. In the drawing room of a private mansion he spoke to a gathering of nobles. He had designed an icebreaker and needed sponsors to build it.

"Because nature has locked her ports in ice," he said, "no nation in the world has more to gain from icebreakers than Russia. With icebreakers, we could navigate the Kara Sea route to the Ob and the Yenisei without danger of shipwreck in the ice. We could even break through to the North Pole!"

When the conservative newspapers got hold of this last statement, they at once condemned the plan. Makarov was an excellent admiral, they said, but a dreamer. Czarist Russia was harsh on men of genius, especially the group of Moscow and St. Petersburg merchants whose railroad interests would be threatened if Makarov's plan succeeded. Even the Navy officials were more inclined to listen to the merchants than to Vice-Admiral Makarov.

So Makarov went on leave of absence to England, where he found British speculators who would listen. In December, 1897, his drawings were sent to the Armstrong Shipbuilding Works at Newcastle, and the building of his ship,

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sponsored by a prominent Siberian merchant and a number of enterprising Britishers, was begun. This is how it happened that Russia's first powerful icebreaker, the *Yermak*, was launched in British waters in September, 1898.

The *Yermak* (named after the Cossack conqueror of Siberia) was a ship of 8,000 tons displacement. Arctic exploration had never seen a vessel of such dimensions! The *Vega*, the *Jeannette*, the *Fram*—all had been yachts in comparison, less than 500 tons. Even the *Roosevelt* of Peary's North Pole expedition, built later than the *Yermak* and called an "ice-battering-ram," displaced only 1500 tons. But the *Yermak* remained an obscure vessel. Summer tests in the Arctic seas had shown the *Yermak* to be greatly superior to any of her predecessors in forcing the ice-jammed passages. But she was never allowed to be used in that capacity. She was acquired by the Russian Baltic fleet and kept busy in the Baltic harbors, keeping them open for shipping for a few extra months and occasionally convoying the fleet out to ice-free waters.

In the winter of 1901, however, the *Yermak* performed a noteworthy service. An armored cruiser had grounded on a reef off Hogland Island in the Baltic. Before the vessel could be floated again, winter set in and she was frozen in solid with the Baltic ice. Salvage work had to be carried out during the winter because the spring breakup of the ice would demolish her. After a discussion of many proposals on how to transport the salvage crew with its heavy equipment for work on the ship off Hogland Island, the *Yermak* was decided upon. She steamed through the Baltic ice as if on a pleasure cruise and brought over a prefabricated house for the workmen, provisions, coal and all the necessary tools. While the salvage work was in progress, the Russian inventor Alexander S. Popov set up his radio

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antenna on nearby Kotka Island and on Jan. 26, 1901, without the use of wires, he received the first wireless message sent from a distance. It was a magnetic telegraph message in code ticked off on a transmitter set up on Hogland Island. The message was that the rock underneath the prow of the cruiser had been removed and the ship's bottom repaired. Soon the *Yermak* arrived and, clearing a channel through the ice, brought the erstwhile shipwrecked cruiser to the Kronstadt Naval Base.

Admiral Makarov, after this success, proposed that a sister ship, a second *Yermak*, be built. Then, he said, a battle fleet could be convoyed through the Arctic Ocean to the Bering Strait and the Pacific. He argued that this northern route was entirely safe from attack and that whereas the distance from Leningrad to Vladivostok via Suez was 12,628 miles, that from Murmansk to Vladivostok via the Arctic was only 5,671 miles.* But Trans-Siberian trains were running east to Mukden, and no second *Yermak* was built. Instead, when the Russo-Japanese war broke out in 1904, the Russian battle squadron sailed away, around Europe, Africa, and Asia, and when it finally arrived in the Korea Strait of Tsushima the Japanese were there to surprise and destroy it.

After this disaster in 1905, in which thirteen ships were sunk or destroyed and four captured, the Russian scientist Dmitri Ivanovich Mendeleyev, discoverer of the periodic law of chemical elements, declared: "If a tenth of what was lost at Tsushima had been spent to reach the North Pole, our battle fleet would probably have got to Vladivostok and escaped the foreign waters of Tsushima."

Demands were made for more icebreakers, to open the

* S. Slavin, "Northern Sea Route in the Third Five Year Plan," *Sovietskaia Arktika*, No. 5, 1939.

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northern seaway, to "break through to the Pole," and in consequence two 1200-ton ice-breakers were built, instead of another large *Yermak*. One was christened the *Taimyr*, after the northernmost headland of Asia, and the other the *Vaigach*, after a strait between the Barents and the Kara Seas.

The *Yermak* remained in the Baltic, but the *Taimyr* and the *Vaigach* sailed through southern waters around Europe, Africa, and Asia to Vladivostok. From this base in the Pacific they sailed, in 1911, to enter the arctic seas at Bering Strait and sail west along the Siberian coast, expecting to go around the Taimyr headland and through the Vaigach or Vaigats ("wind-hole" as the Dutch christened it) Strait into the White Sea in one season. Instead of completing the voyage in one summer, three summers were required. Twice they returned to winter at Vladivostok and refuel on coal carried east by the Trans-Siberian railway. Then, in 1915, after a winter spent icebound off Cape Chelyushkin, northernmost cape of the Taimyr Peninsula, the *Vaigach* was sunk on a reef near the mouth of the Yenisei. The *Taimyr*, however, finally reached Archangel.

The voyages of the *Taimyr* and the *Vaigach* had been encouraged chiefly by the Russian military authorities, who desired a seaway through which warships might pass via the north from the Baltic to the Pacific. Sea-borne freight to Siberia was a secondary consideration. But the Siberian merchants were interested in a cheap sea freight line and tried to requisition the *Yermak*, but they could not. She was too busy keeping the Baltic harbors open. Her record of service by 1914 was one thousand ships safely convoyed through Baltic ice.

In 1914 World War I broke out. The German onslaught

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became more and more effective. Russia's outlets to the Atlantic through the Baltic and the Black Sea were closed. English transports bringing munitions to the Russians had to go through the north to the ice-free port of Murmansk, or to Archangel. But when the British goods arrived at these ports, there were no railroads to transport the load to Petrograd. Up to then the only communication between these ports and Moscow or Petrograd had been by wagon road. With a shock, the Czarist Government awoke to the importance of the northern waters even for warfare restricted to Europe. Funds were immediately voted for railway spurs from the Central Russian system to the ports of Murmansk and Archangel. But the majority of officials continued to regard the Arctic as a desolate, useless adjunct to the Empire. When, in a proposal to promote arctic shipping, a Czarist official read that Murmansk was an ice-free port by virtue of the Gulf Stream that warms the Scandinavian coast, he scrawled across the top page the comment that "There never was a Gulf Stream in the arctic and there could not be. What nonsense!"

Finally, however, with the building of the railroad spurs during the war emergency of 1914-1917, millions of rubles were poured into English shipyards for icebreakers by the state that had been too "poor" to build a second large icebreaker in peacetime. By the winter of 1916-17, England had built for Russia seven icebreakers. Two were 10,000-horsepower vessels, designed to make hash of the winter ice in the White Sea and so keep open the Archangel harbor for war supplies.

But, with the Russian revolution, the eastern front collapsed. The newly built icebreakers were seized by the Entente, only to be abandoned in the White Sea at the

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time of defeat. Several were seized as prize ships and later resold at high prices to the Soviets.

The *Krassin*, a 10,000 ton ice-breaker, was originally the *Sviatigor* (Holy Mountain) of the White Sea fleet. In 1920, on her first voyage under the Soviets, she convoyed twelve vessels through the Kara Sea to the Ob and the Yenisei rivers to bring cargoes of Siberian grain out for the relief of the famine areas along the Volga. Another of the early Soviet icebreakers was the *Lenin*, a 5700-tonner, which first appeared on convoy duty when she brought eight vessels through the ice-choked Kara Sea to the Ob and Yenisei rivers in 1921. The rise of the modern Northern Sea Route dates, actually, from these early convoys by the *Krassin* and the *Lenin*.

While the big ships like the *Krassin* and the *Lenin* were used in convoy service, the icebreakers *Malygin*, *Sedov*, and other smaller vessels (also salvaged from the war emergency fleet) were utilized as sealing boats and for explorations of Arctic islands. It was not until 1928, however, when the *Krassin* and the *Malygin* were sent by the Soviet Government on a mission of rescue, that the world awoke in a dramatic way to what was being done in the Arctic.

Umberto Nobile's dirigible had crashed after flying over the North Pole, and the survivors, marooned on an ice floe, sought in vain to inform the anxious world of their whereabouts until a radio amateur living along the White Sea caught their faint wireless signals of distress. Soon the Nobile ice camp was located northwest of Spitsbergen. Airmen and seamen of many nations participated in the rescue, but it was the stout *Krassin* that forced a way through the ice to the men and brought them back to the mainland. The success of this mission inspired bold plans for the use of icebreakers. Arctic exploration became

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an integral part of the First Five Year Plan of industrialization.

With the help of the arctic icebreaker fleet, Soviet explorers now located permanent research stations at points far north of the mainland and kept them provisioned. The polar station on Franz Josef Land was thus established in 1929, and it has been maintained ever since as the northernmost arctic station in the world, serving in 1937 as the point of departure for the Soviet planes that took the Papanin expedition to its drifting station on the ice floe at the North Pole. Other stations were founded along the Siberian arctic coast, and by 1932 the Kara Sea route was operating on a scheduled basis, reaching and tapping the resources of the Yenisei and Ob river valleys. But as yet no ship had travelled all the way from Archangel to the Bering Strait in one navigation season. Moreover, since Nordenskjöld's voyage in 1879 no ships had been convoyed from the west to the Lena River mouth.

Then, in 1932, the voyage of the *Sibiriakov* was undertaken. This vessel was a 1,383-ton converted Scottish whaler, with engines of 2,000 horsepower, built at Glasgow and formerly called the *Bellaventura.* The name was changed in order to honor Sibiriakov, a Siberian merchant who had invested large sums of his private fortune in attempts to develop the northern seaway.* The *Sibiriakov* made a through voyage from Archangel to the Bering

* Like Oscar Dickson, after whom Dickson Island is named, Sibiriakov had been one of the backers of the voyage in the *Vega,* when Nordenskjöld circumnavigated Eurasia, requiring the two navigation seasons of 1879-1880 to pass around the Asiatic North. On this voyage, Nordenskjöld convoyed the steamer *Lena* around the Taimyr peninsula to leave her at the mouth of the river of the same name, where she was in operation as late as 1933, when the Soviets first brought freighters around the Taimyr to the Lena delta.

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Strait in two months and four days, and so proved that ships need not winter in the north.

In the following year three freighters were convoyed by the icebreaker *Lenin* from Archangel around the Taimyr to Tiksii Bay, the first Soviet freight ships to arrive there from the west.

Then a tragedy occurred. The *Chelyushkin*, a Danish-built transport vessel sank in the Chukot Sea, opposite Alaska's northwestern extremity. On a voyage from Leningrad around the north of Eurasia to Vladivostok in the summer of 1933, the *Chelyushkin* had become icebound near the Bering Strait in the fall and had drifted with the pack until February, 1934, when, crushed by ice, she went to the bottom. To rescue the one hundred survivors, Russian planes took off from the Chukot Peninsula and American planes from Alaska. All of the *Chelyushkin's* crew were saved, and the success of this rescue inspired the Soviet Union's transpolar flights to the United States in 1937.

Another project of importance during the 1934 navigation season was the voyage of the *Litke* from Vladivostok via the Northern Sea Route to Murmansk. The *Taimyr* and *Vaigach* had failed to make this crossing in one shipping season and were compelled to winter in the Arctic ice. The *Litke's* log tells an interesting story. Originally known as the *Earl Grey*, the *Litke* had been built in England in 1909 for winter mail and passenger service between Quebec and Prince Edward Island. During the First World War she was purchased by Russia and served in the White Sea emergency fleet under the name of *Canada*. Next, during the Allied intervention against the Soviet revolution, she was seized by the British Admiralty and used for mail and passenger service between Archangel and Murmansk.

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When the intervention forces withdrew, the *Canada* was again returned to Russia and thus came to sail under the Soviet flag.

The Soviets renamed her the *Fedor Litke*, in honor of a noted Russian admiral who explored Novaya Zemlya early in the nineteenth century. Unlike the *Yermak*, which crushed the ice by kedging her heavy prow over the top edge of the floes, the *Litke* breaks up ice fields by splitting them, ice-pick fashion, with her slender axe-edged prow. Graceful, she is known as the "white swan" of the Arctic fleet. The *Litke's* first arctic service under the Soviets was to release the ice-bound *Malygin* in the Kara Sea in 1920. Between 1925 and 1929 she was used in the Black Sea, breaking a passage in the ice for shipping into the Azov Sea. Then, in 1929, she was based at Vladivostok, from which port she made numerous voyages, most remarkable of which was her long voyage westward to Murmansk, via the Arctic Ocean, in the summer of 1934.

In 1935, two transport ships under icebreaker convoy repeated the *Litke's* performance with additions. They sailed westward from Vladivostok via the Northern Seaway and called at London and Antwerp before docking in Leningrad the same year. The following summer *fourteen* freighters were convoyed from Vladivostok to Leningrad through the Northern Seaway.

"Most or all explorers would have said ten years ago that it would not be possible to complete the northern passage around Asia on an average more than once every two or three years," wrote Vilhjalmur Stefansson. Commenting on this great historical event, Stefansson added, "Now most feel that it will be completed most years by most of the ships that try it."

The anti-climax came in October, 1937, when most of

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the icebreaker fleet and nearly twenty transport vessels were caught with empty coal bunkers by the winter freeze-up. The mighty *Krassin*, the *Lenin*, the *Litke*, the *Sedov*, the *Sadko*, the *Malygin*—all icebound and useless—had to spend the winter in the Arctic Ocean north of Siberia. The *Sibiriakov* was disabled. It was realized then that if an assault were to be made on the Soviet Far Eastern borders large-scale shipping could not be carried out.

Moscow, at the time, was in the midst of the treason trials during which charges were made and evidence presented that indicated the corruption of certain high officials in the Northern Sea Route Administration. In 1937 shipping had been deliberately interfered with. Ships had been sent on needless errands, exhausting their coal stocks when far from supply bases. Orders given by navigation officers engaged in convoy duty in the Arctic, orders necessary for successful completion of voyages, had been countermanded by "higher-ups." As a result, many vessels were caught in the winter freeze-up and rendered useless until late in the summer of the following year. Before that, in February, 1938, however, an S.O.S. was sounded by the Papanin ice-floe research camp, which since landing at the North Pole in May, 1937, had drifted toward Greenland. In a storm, the mile-square ice floe had broken up, and the explorers were marooned on a fragmentary floe about sixty feet square. Icebreakers were needed to rescue them. But the icebreaker fleet was icebound in the Arctic. So to the rescue steamed two battle-scarred veterans, the *Yermak* and the *Taimyr*.

Forty years had passed since the *Yermak* was launched. Makarov, her inventor, had fallen in action when the Russian forces were overwhelmed by Japan's surprise

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assault on Port Arthur. In those 40 years, the *Yermak* had rendered many useful services, but all she had done was as nought to what she accomplished in 1938. Not only did she, with the *Taimyr*, aid in rescuing the four scientists but she succeeded in releasing the *Lenin* and the *Litke* and their fifteen convoyed ships from the ice so that they might proceed, if need be, immediately to Pacific waters. The *Krassin* was also released, but by her own crew who, finding themselves near coal deposits on the Taimyr coast, spent the icebound winter digging enough coal for the ship to proceed to the coaling station at Tiksii Bay once the navigation season commenced.

After the *Yermak* had released the big units of the arctic fleet in August, 1938, she sailed north into the polar basin until, at the end of that month, she reached latitude 83°06′ N., an all-time record for free navigation in the Arctic Ocean. She might have gone on to "break through to the Pole," but her job was to release the icebreaker steamers *Sadko* (sunk in the White Sea in 1916 and raised from the bottom by the Soviet ship salvage trust in 1934), the *Malygin*, and the *Sedov*, then held captive in the pack ice and drifting northwest across the polar basin. The *Yermak* broke through the pack ice as if in the Baltic and released the *Sadko* and *Malygin*; with refueled bunkers they steamed out behind her. But the rudder of the *Sedov* had been disabled during the icebound winter, and she yawed in the narrow channel cleared by the *Yermak*. She had to be abandoned, to continue her derelict drift across the polar basin. Manned by a skeleton crew, she hit the headlines when in March, 1939, still drifting, her engines dead, she came within the 86th parallel, nearer to the North Pole than any ship has ever been before or since. After a thirty-month drift, the *Sedov* was released from the pack north of

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Spitzbergen and once more returned for service to the arctic fleet.

At the close of her summer's work, the *Yermak* sailed in early September to the straits off Cape Chelyushkin. Flags were raised in her honor, and a salute was fired from the naval guns mounted on the *J. Stalin*,* then on her maiden voyage in Arctic waters. Embodied in this new icebreaker's design, as in that of her sisterships *L. Kaganovich*, *V. Molotov*, and *S. Levanevsky* also newly built Soviet icebreakers, is all the experience the Russians have gained during the forty years since the *Yermak* was built. Fittingly, off Asia's northernmost land, the *Yermak* greeted her successor as flagship of the arctic fleet, a line of famous ships, which now maintain commercial shipping on a regular schedule through the Northern Seaway.

In 1939, the *J. Stalin* completed the voyage from her base at Murmansk to the Bering Strait, a distance of 3,800 miles, in one month, and in the following month returned again to Murmansk. Since that time two-way traffic across the Arctic Ocean during one navigation season has become a possibility.

Then the new type arctic transport, the *Dickson*, launched in 1940, sailed forth on a maiden voyage from Murmansk to Tiksii Bay at the mouth of the Lena river. She not only completed it, returning safely to Murmansk, but made a second voyage that summer through the Kara Sea to Port Igarka, on the Yenisei, where she picked up a

* The *J. Stalin* is 345 feet long and 75 feet wide; displacement of 11,000 tons; three steam turbine engines with total of 10,000 h.p.; bunkers holding 3,000 tons of coal; nine boilers and four furnaces; 25-kw. steam-driven dynamo; three hydroplanes, launched by catapult, for ice observation; all-welded double hulls extend completely around the ship; especially designed curved stern; pumps with a capacity of 3,500 tons per hour. Model exhibited at the New York World's Fair in 1939 showed mounted naval guns (*American Review on the Soviet Union*, Feb.-Mar., 1942, p. 22).

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cargo of timber. Out of the mouth of the Yenisei she then sailed and returned to Murmansk before the winter freeze-up. The *Dickson*, on these two voyages, was assisted by the icebreaker convoy service.

We see that the Northern Seaway has been opened in a big way.

In the cabins of riverboat captains along the great Siberian rivers are photographs of mighty icebreakers. It is difficult to tell which is most popular: the *Yermak*, the *Stalin*, the *Krassin*, or almost any of the others, for without them traffic throughout Siberia would be restricted to the middle reaches of the Lena, Ob, and Yenisei rivers, to the limited areas tapped by the Trans-Siberian Railway, and to motor roads. With them, however, seaway cargoes shipped from America's west coast can be transferred to river steamers for delivery to China or Mongolia. As the Soviet transarctic flights of 1937 opened what may soon be a warplane ferry service across Alaska and Siberia by the great circle route to Chungking, so the icebreaker service of the Siberian arctic seaway has opened a combined sea-river-rail-and-motor route, which has as its greatest present use the conveyance of supplies needed by the United Nations in the maintenance of their anti-Axis land front in Asia.

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BURIAT-MONGOLIA

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10

Buriat-Mongolia, Mongolian People's Republic, and Tuva People's Republic

THE REAL EAST OF SOVIET ASIA BEGINS EAST OF KRASNOYARSK, where the Irkutsk Region and Buriat-Mongolia are next door to the traditional homeland of the Mongol peoples. East of Krasnoyarsk the people have for more than twelve years been building defenses, when they were not actually fighting against Japanese aggression, the constant threat of which dominates the life of all the people inhabiting the eastern and central part of Asia. So much is this true that, although differing in form of government, the peoples of the Irkutsk Region and of the Buriat-Mongolian Soviet Republic are not only friendly with those of the Mongolian and Tuva People's republics, but make common cause with them to stay the march of the Japanese warlords.

In the spring of 1940 we travelled over the Trans-Siberian Railway through the Irkutsk Region and Buriat-Mongolia. We found evidence here of impressive economic development, designed to make this area a powerful rear for the "Far Eastern Front." We had visited the region three years before. Then the railway had been single-tracked; now it was double-tracked all the way. Many railway stations were new, others had been rebuilt; most looked clean and freshly painted. Busy factories and sawmills could be seen at frequent intervals on both sides of the tracks. On the still frozen Yenisei at Krasnoyarsk, as our Trans-Siberian express train rumbled over a high bridge, we saw trains of horse-drawn wagons and motor

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trucks crossing the river below on ice, a convenient Siberian river road. Although it was spring, the broad river was white and motionless, as if cemented between the high cliffs. Over the steep slopes of the high bluff on the river's right bank, skiers were swooping down the highest ski jump in the Soviet Union, one on which a young Soviet Torkler had just cleared 270 feet, as the newspapers reported, in what was called the longest ski jump on record. What we were seeing was a training ground for the "winged sky gliders" of the Siberian ski battalions.

The first night out of Krasnoyarsk we passed Polovina—"halfway" on our journey between Moscow and Vladivostok, and shortly after that we came to the small junction of Taishet, where railway tracks wound off northeastward, forming the northern branch of the Trans-Siberian Railway, now under construction across the frozen wastes of Yakutia and the Soviet Far East. The line, we were told, crossed the Lena River and was to run north of Lake Baikal through Kirensk and Bodaibo to Komsomolsk and on to Sovietskaya Gaven, a port on the Pacific. The exact route and state of completion of this new railway is a well-guarded Soviet secret, but we were told authoritatively that only a few relatively short sections remained unfinished. UP Correspondent Herman Habicht, who crossed Soviet Asia after us, cabled on September 18, 1941: "An entirely new section of the Siberian Railways serving the major Russian military and economic base at Komsomolsk is reported nearing completion."* This road, named the Amur-Baikal Magistral, will have great importance economically and strategically. It will be a line across easily defended terrain for the transportation of supplies to and from the Pacific seaboard in case the Trans-Siberian main

* *New York Times,* Sept. 18, 1941.

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line skirting the Amur river frontier should be occupied by enemy forces in an attempt to sever the Soviet Far East from the rest of the Soviet Union.

After Taishet, our next important stop was Irkutsk, that old Siberian town known to ancient traders who came north out of Mongolia and China over the long caravan routes before the Trans-Siberian was built. Irkutsk (population 250,000) is capital of the region of the same name (population 1,300,000) and possesses the dubious distinction of being one of the last large Soviet cities to begin the installation of modern conveniences. When we stayed in Irkutsk in 1938 it had no central water supply, no sewage system, and no street cars; yet this town was rated as one of the most "cultured" centers in all Siberia by the distinguished American traveller, George Kennan, when he visited it toward the close of the nineteenth century. Even today Irkutsk may lack these amenities; but in days when bombing raids are reducing to a shambles even the most up-to-date municipal installations, we see no reason to make a point of this aspect of the urban life of Irkutsk.

Irkutsk is the administrative center of Irkutsk Region, which is noted for two rich gold-bearing areas known as the Bodaibo and Lena gold fields. The latter field was the scene of an infamous massacre in 1912, which resulted in such a wave of protest strikes throughout Russia that the Czarist regime itself was shaken. "The ice is broken," wrote one revolutionary of the period, and the mass upheaval in 1912 was soon followed by the downfall of the Czar in 1917.

From Irkutsk we followed the Angara river to its headwaters at Lake Baikal, a remarkable body of water 375 miles long, 20 to 40 miles wide, and more than a mile deep. To the north of the lake, and separated from it by

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only a narrow strip of the Irkutsk Region, is Yakutia; around the southeast shore like a half-moon is the Buriat-Mongolian Republic; farther south is the Mongolian People's Republic, and farther east the Chita Region. The Siberian territory east of Lake Baikal to the Pacific is popularly called the Soviet Far East.

It is believed that at one time Lake Baikal was connected with the Arctic Ocean and was isolated by a terrestrial disturbance. Often referred to as the Museum of Living Fossils, it is the home of the unique viviparous fish, the *Callianymus Baikalenis*, which reproduces its young alive. Living at great depths, the body of this unusual aquatic creature, completely encased in a thick layer of fat, melts and runs in the sun when brought to the surface. Lake Baikal, like the northern part of the Caspian Sea, is among the few inland bodies of water where seals abound.

"Scientists from all over the world come here to Lake Baikal," said a commander in the Far Eastern Army who was a passenger on our train. "I have met many of them during my trips across Siberia by rail from Moscow to Vladivostok."

More than three hundred streams and rivers, including the Selenga, flow into Lake Baikal, but only one, the Angara, flows out. At its source, the Angara river is so swift and full of rapids that its waters do not freeze until the end of December or early January, and remain frozen only for two or three months in the dead of the Siberian winter. However, the lower river freezes normally with the result that the waters poured down by the upper river in late autumn are impounded by the frozen lower river and overflow above the ice, creating serious floods in the city of Irkutsk. But the cold weather then lends a hand in flood

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control; Irkutsk citizens simply shovel high snow banks along the river's edge, and these freeze over to form natural ice dikes against the turbulent water.

A unique river is the Angara, with her autumn rather than spring floods, and tales are told reflecting her excessive force.

"There's an enormous boulder in the river bed just where the Angara flows out of Lake Baikal," the Red Army officer told us. "When the waters are clear you can almost see it swaying as the mighty Angara rushes around and over it. Should it ever be dislodged, the Angara would rush out in a flood so tremendous as to inundate the Siberian lowland opposite the left bank of the Yenisei, and lower the level of Lake Baikal."

The Buriat-Mongols have their legend about the Angara. Once upon a time there lived Baikal, an old man with a young spouse, the beautiful Angara. To hide his wife from the eyes of strangers, the jealous Baikal reared high mountains around his home in all directions. But Angara was restive and dreamed of escape. With her sisters rivers, she conspired to curcumvent Baikal's vigilance. One dark night, while the old man was sound asleep, Angara and her sisters broke through the mountain walls and overflowed into the plains beyond. Awakening, Baikal saw his faithless wife running off. Livid with rage, he seized the nearest cliff and hurled it after her. The cliff struck the earth in front of Angara and broke into huge boulders, barring her way. On she sped past the rocks, leaping in cataracts over them and leaving behind churning rapids; on and on she fled, out of the reach of old Baikal, finally to spend her strength and fling herself into the waiting arms of the gallant young giant, Yenisei.

Many other stories are told about the Angara, but more

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enthralling than those of the river's origin are those of its future. This one is a story of plans to harness the Angara's boundless energy by constructing Siberia's largest hydro-electric plant at her rapids, capable of supplying the people and industries of hundreds of thousands of square miles of territory with power and light. There is enough water power reserve in the Angara, Selenga, Barguzin, Chikoi, and other Buriat-Mongolian rivers to generate more than five million kilowatts of electricity per annum, a capacity five times more than that of the T.V.A. in the United States. This is the Angara "dream"; but the Ural industries were also once just that. Meanwhile the Angara spends her boundless energy leaping rapids to give her wild, untamed waters to the Yenisei.

The Trans-Siberian Railway passes around the south-eastern shore of Lake Baikal along a track hewn out of precipitous rock by convict labor under the Czars. Craning our necks, we looked up at the high cliffs of massive rock towering almost directly overhead. The reflection of the sun on the frozen surface of the lake, visible through car windows on the left, was blinding. Then suddenly we were plunged into the darkness of a tunnel, then another and another. There were altogether thirty-six of these tunnels, alternating now with cliffs, now with lake. "It's more beautiful here," commented one of the passengers on his way to the Far East after a vacation in the Caucasus. "Nature is less tame; the country is wilder and more rugged." Another, a doctor who had lived in Sochi on the Black Sea Riviera, nodded agreement. "The mountains are more magnificent here than in the Caucasus," he said. We could see his point.

After a while the cliffs receded, and the snow-capped ridges of the Eastern Sayan ranges came into view. For

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eight hours we rode along the shore of Lake Baikal with these mountains visible on the horizon.

Toward evening, after crossing the frozen Selenga River, the old waterway to Mongolia and China, we reached Ulan-Ude, capital of the Autonomous Soviet Socialist Republic of Buriat-Mongolia, situated in a half-moon along the east shore and to the north and south of Lake Baikal.

Under the Czars Buriat-Mongolia's vast natural wealth lay completely dormant; its industrial development was limited to one wine distillery. The people were nomads, wandering about the countryside in their *kibitkas.** There was one lama† for every three adult Buriats. Religious precepts forbade the people to wash dishes or garments.

Czarist officials were not at all concerned with improving the situation. In fact they seem to have done their best to eliminate the Buriats as a people. The Buriat people lived in terrible poverty and dirt, according to the Russian geographer Freidin. Tuberculosis and syphilis became as common among them as colds. During the thirty years preceding the revolution, the number of Buriats declined by a third. Buriats were neither recruited nor even impressed into service for activities in the rear during the First World War, but were requisitioned like cattle. "Requisition" is the precise term used in the official instructions of 1916.

The history of the Russian conquest of the Buriat-Mongols well characterizes the method of Russian conquest everywhere in the building of the vast Czarist Empire.

The Buriats were first named in Russian archives in 1612, when it was recorded that the Siberian tribe of the

* Leather-covered, completely enclosed vehicles mounted on wheels in summer and on runners in winter.

† Monk belonging to the modified Tibetan Buddhist religious system.

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Arani had submitted to the Russians.* A short while before this event the Arani had been attacked by the Buriats. In 1622, some 3000 Buriats appeared on the Yenisei river. They came into first contact with the Russians in 1627, the year in which the Russian Maxim Perfirier with forty Cossacks followed the Tunguska river (Upper Tunguska is sometimes used to designate the Angara river) and reached the Buriat settlements. He tried to make them tributary to the Czar, but they refused. During the same year the Cossack captain Peter Baketoff built the *ostrog* (fort) of Kibenskoi on the Tunguska and subjected the Buriats on the Oka river.

These Cossack expeditions were not made simply in quest of more territory. Rumors had reached the Russians that the Buriats had much silver. In 1628 the stories of riches induced Yakof Khripunof, the Voyevoda of Yeniseisk (near the confluence of the Angara with the Yenisei) to make the journey into the land of the Buriats. He met them on the Oka. But he found no silver. He did, however, carry off twenty-one Buriats as slaves.

In 1631 the Russians built an *ostrog* near the mouth of the Oka and called it Bratskoi (now Bratsk). Then they attempted to negotiate with the Buriats. The captured slaves were sent back. But the two Cossack envoys sent with them met an unpleasant fate. One was killed, the other expelled. Later, Perfirief and fifteen Cossacks made another journey to the Buriats. They gave him and his men each a sable skin, but refused to recognize this as tribute. The Buriats also induced the Tunguses to cease paying the *Yasak* (fur tribute) to the Russians.

In 1635 the Buriats killed the entire garrison of the

* H. Tyrell and Henry A. Haukeil, *The History of Russia* (London, 1880).

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Bratskoi *ostrog* and carried off the guns and ammunition. A punitive expedition sent by the Russians defeated the rebellious tribes, and by 1689 the Russians controlled the area as far as the Oka river.

Meanwhile, history relates, the Cossacks were also advancing on the side of the Lena. The Tunguses, there, were tributaries of the Buriats and were forbidden by the latter to pay the Russians tribute. Sotnik* Baketoff accordingly set out to punish them. He had only thirty men with him, of whom he left ten at Ust-Kut. With the rest he advanced to the river Kulenga, where the Buriat steppe commenced. This was in 1631. After a march of five days he came upon a body of 200 Buriats who fled. The Cossacks, having entrenched themselves, sent to demand that the Buriats should become Russian subjects. The natives promised to send them some furs in two days as a tribute. Two of their chiefs accordingly went with sixty followers. They were allowed to enter the stockade after depositing their bows and arrows outside, and they then offered five wretched summer sable skins, and a rotten fur pelt almost denuded of hair.

The Russians realized that they had been tricked. The Buriats drew their knives and daggers but the Russians were prepared. They killed forty of them and wounded most of the rest. Meanwhile the Buriats assembled a large force to take revenge. The Russians retired.

In 1640 Vasilii Vitesef reached the land of the Buriats at the mouth of the Onga river, a tributary of the Lena. But the Buriats refused to pay tribute on the ground that they were already paying it to the Mongols south of Lake Baikal. In 1641 a Russian force set out to conquer the recalcitrants, subduing them in three weeks. The chief,

* Cossack commander of one hundred men.

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Chepchugai, kept up the struggle; after he had wounded many Russians with his bow and arrow, his tent caught fire, and he perished in it. In reprisal Kushum, Chepchugai's brother, collected a force of 2000 Buriats and attacked the Russians. He was defeated, but not before he had inflicted bloody losses upon the invaders. After this a peace was established, which lasted for nearly three years.

In 1644 the Cossack subchief Kurbat Ivanov suddenly attacked the Buriats in the steppes of the Angara and returned with much booty. This brought about an alliance of many Buriat tribes against the Russians. They advanced against the *ostrog* of Verkholensk, carried off the cattle, and beleaguered the fort. There were 2000 of them, armed with bows and arrows, swords, and lances, many wearing coats of mail. Though the Russians numbered only fifty, they had firearms and stood them off. The fort was besieged for more than a year and not relieved until a body of 130 Cossacks came from Ilimsk.

In 1646 the Russians, led by the Cossack Alexei Bedaref, marched against other Buriat tribes. Meanwhile Buriat discontent flared, and with it arose an unexampled spirit of unity. Buriat tribes formed an alliance, and for the next few years besieged the Russians in many fortresses. But Russian firearms won. By 1655 the Buriats in the Lena region were subdued.

During this period the Russians came close to Lake Baikal, the Sacred Sea of the Buriats. The first Russian to navigate it was Kurbat Ivanov, who had marched from Yakutsk in 1643 with not more than 75 men. He made a landing on the island of Olkhon and defeated more than 1000 Buriats who lived there. In 1647 another Cossack, Kolesnikoff, reached the Upper Angara and built a fortress. Kolesnikoff heard that Mongols who encamped south of

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the lake were rich in silver. He sent four Cossacks with a chief of the Tunguses to explore. They encountered the Mongol chieftain Turukai-Tabun, who received them well and gave them some gold and two silver bowls. He told them that precious metals in his possession came from the Chinese.

Despite this the Russians did not give up hope of finding gold and silver in the regions about Lake Baikal. They heard that the Buriats on the Angara obtained their silver from the Mongol ruler, Setzen Khan of the Khalkass, Turukai-Tabun's father-in-law. The Russians asked Turukai to supply them with guides to his father-in-law's camp. Turukai knew the object of the visit. He knew it was hopeless to seek for silver and gold in Mongolia. But he could not convince the gold-mad Russians. He sent them by such a roundabout route, therefore, that it took two months to make the journey, which should have taken two weeks at the utmost. The Russians again learned from Setzen Khan that any gold and silver he and his people possessed had been obtained by trading with the Chinese. On their return from the journey the Russians built a fort at Barguzin on Lake Baikal. This became their main stronghold for eastward expansion. In 1661 a fortress was built on the Irkut river, later to become the city of Irkutsk. By then all of the Buriats had been conquered. Thus began a period of decline for the Buriats, which was not to cease until the Russian Revolution of 1917.

Yet all that was necessary to turn the Buriat-Mongols into the paths of modern life was to give them equality, self-government, and land. These were granted by the Revolution of 1917. Nevertheless, so distant was the Buriat-Mongolian Republic from the center of Russia and so primitive its people that not until 1928 were the first efforts

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made to utilize its natural resources. During the past five or six years Buriat-Mongolia has undergone an amazing industrial expansion, which has laid its imprint most clearly upon Ulan-Ude, the capital.

When we arrived in the city of Ulan-Ude, where we had decided to stay a day or two (we had been there before), it was rather late in the evening, but the streets were crowded with people. It seemed strange to us as we left the station to see new four-story apartment houses, modern schools, and imposing structures of industrial plants lining the central streets, along which, mixed in colorful array with the crowd of city folks, passed Mongol peasants carrying home on horse and camel goods purchased in town. Side by side with the horses and camels were Buick automobiles, Dodge trucks and an assortment of cars of Soviet manufacture.

Because Ulan-Ude contains nearly a fourth of the 542,000 inhabitants of the Republic it is the heart of Buriat-Mongolia. The city's factories are unusually large, the main one being the $50,000,000 Locomotive and Car Building and Repair Works, which is one of the most vital strategic establishments in the whole of the Soviet Far East. Producing armored trains and heavy tanks for the Far Eastern Red Armies, it is also conveniently situated for the supplying of war materials to China by way of the recently improved highway across the Mongolian Republic. The plant is located far enough from Japanese-occupied Manchuria to be safe from unexpected attack. Ulan-Ude also has a large glass factory, annually producing nearly 25,000 tons of glass, a packing house that turned out 25,000,000 tins of canned meat in 1940, and a number of flour mills.

But the industrial life of the country is not limited to the

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capital. Southwest of Ulan-Ude is located the little-known but vitally important Djidinsk Tungsten Combinat at the site of one of the world's largest deposits of the metal. Here tungsten, gold, silver, and molybdenum are also produced in such quantity that a city of 30,000 people has risen near the mines and plant within the last three years. At Slyudinskaya mica is mined, and in the south of the Sayan Mountains, asbestos. On the Baikal island of Olkhon there are deposits of manganese, a metal essential in war production and seriously deficient in the United States. The Russians are not at all anxious to reveal the amount of manganese being extracted at Olkhon, but the deposits are spoken of as "colossal." Elsewhere, since the beginning of the Third Five Year Plan, a chemical combinat has been built, a large metallurgical plant, a packing house at Kiltak, a copper works in the north Baikal area, and a fish cannery at Ust-Barguzin.

Buriat-Mongolia's most interesting industrial undertaking is the underground coal-gasification plant at Lake Gusinnoe (Goose Lake). By a process rarely utilized outside the Soviet Union, coal is directly converted into gas underground, eliminating the need of mining. First tested in Moscow and in the Donetz basin coal mines, the gasifying of coal deposits was found to release from 800 to 2000 workers per mine above and below the ground for other industrial tasks. The gas, after being piped to the surface, is delivered to industrial plants at a small fraction of the cost of extracting and shipping coal. Between 1936 and 1940 the number of workers engaged in Buriat-Mongolian industry increased from 14,000 to 30,000 and the 1940 industrial output was 44 times greater than that of 1920. During the First Five Year Plan only $10,000,000

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was spent on industrial development; during the Second Five Year Plan this was increased to $200,000,000.

More than 78 per cent of the Republic's territory is covered by thick forests. On the east side of Lake Baikal the world's rarest sable is found and in the Barguzin Game Preserve sables are being scientifically bred. Buriat-Mongolia is also one of Soviet Asia's major cattle-breeding regions. Of the total of 3,500,000 head of cattle, most are herded in a collective fashion, some ranches having as many as 10,000 head. To stimulate meat, milk, and wool production individual households are permitted to raise five to eight camels, eight to ten cows, ten horses, and 100 to 150 sheep, which they may dispose of by sale either to the state or to the collective grain farms, all of which are obliged to build up local herds of livestock, the size being determined by the pasture acreage. Twenty years ago the Buriat-Mongols were largely wandering herdsmen, but recently they have turned to agriculture and a settled mode of life. In the famous Zhergalantin valley, the great landed estates of former lamaseries have become collective farms, where former nomads have moved from migratory tents to cabin homes furnished with nickel-plated beds, Viennese bentwood chairs, mirrors, and wardrobes. The Republic's extensive grain farms possessed 2000 tractors in 1940 as compared with 1150 in 1938.

Before 1930 the transportation needs of Buriat-Mongolia were almost exclusively served by the Trans-Siberian Railway. Since then, however, and especially because the country is the gateway to the Mongolian People's Republic, an intensive rail and highway building program has been inaugurated. A 154-mile railway has been built from Ulan-Ude to Naushki, and another was completed this year to Kiakhta at the Mongolian border. This railway is par-

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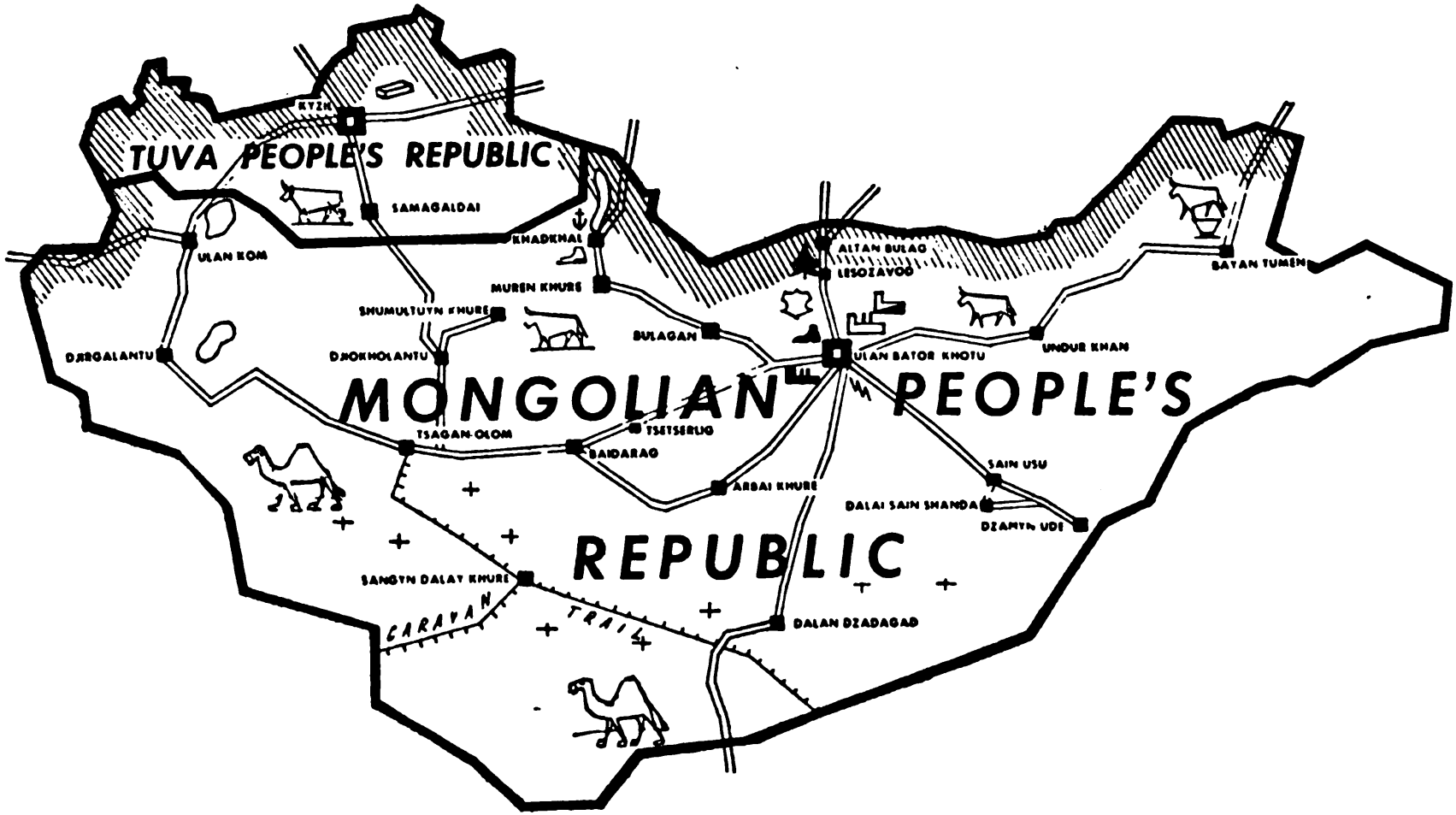

MONGOLIAN PEOPLE'S REPUBLIC

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ticularly important in the defense of Soviet Asia because it can be used for transporting troops to Mongolia. Steamboats, built at the Myorsk wharves, ply the Selenga river on schedule, and many of them carry goods to the Mongolian People's Republic and China. An excellent all-weather highway connects Ulan-Ude with Kiakhta and Ulan-Bator in Mongolia; other roads link Ulan-Ude with Novo-Selengirsk and Tsakir. Passenger airlines connect Ulan-Ude with Moscow, Vladivostok, and Ulan-Bator.

The Buriat-Mongols, once illiterate, now have 500 primary and secondary schools and 14 higher and technical schools with a total attendance of 40,000. There are 17 newspapers, 134 libraries, and 147 motion picture houses.

The people of Buriat-Mongolia have known foreign occupation in the past, the most recent being the Japanese in the years following the Russian revolution. Memories of cruelties still live, and the Buriat-Mongols would again fight fiercely to keep the invader out.

Mongolian People's Republic

Once known as Outer Mongolia, the Mongolian People's Republic is separated from Russia in the northwest by the small Tuva People's Republic and borders on Manchuria in the east and China in the south.

Extending, as it does, deep into the Gobi desert, climate and geography have made of the Mongolian People's Republic a country of cattle and cattle breeders until today it possesses more cattle per unit of population than almost any other state in the world. In 1940, there were 26,000,000 head of cattle. By 1945 the number is expected to exceed 50,000,000. If expectations are realized, there will be more than 50 head of stock per man, woman, and child of the population of 900,000, and just under 100 for every

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square mile of territory (555,000 square miles). Despite this animal wealth, however, Mongolia's economic importance is quite small. Exactly the converse is true of its military importance.

The same geography that made the Mongolian Republic a semidesert, restricting its economy to cattle and sheep breeding, confers upon it the role of buffer state between the Soviet Union and Japan's outposts on the Asiatic continent. "The geographic position of Mongolia," said Lenin in 1919, when discussing its relationship to the Soviets, "will make it the goal of imperialist powers seeking to make war against the U.S.S.R." This determines to the present day Russia's attitude to the Mongol state.

Although collaborating closely with the Soviet Union, and despite the presence of Soviet political, diplomatic, military, industrial, and agricultural advisers and instructors, the Mongolian People's Republic is outside the Soviet Union. Its constitution (adopted in July 1940) defines the republic as "an independent state of working people (arats,* workers, and intelligentsia) who abolished the imperialist feudal yoke . . ." Under the new constitution the supreme organ of power is a legislative body called the Great Hural, convened not less than once in three years. Responsible to the Great Hural is the Small Hural of 71 members. The Council of Ministers is composed of ten members under the chairmanship of Marshal Chang-Kao-Han.

Twice during the past twenty years Japan has attempted to use Mongolian territory for aggression against the Soviet Union. The first time was in the years immediately following the revolution, when Japanese troops occupied Siberia and the Russian Far East up to Lake Baikal.

* Nomad cattle breeders.

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"In the spring of 1921," writes George Stewart, "Japan once more backed White Guard officers in an ambitious enterprise. A plan was formulated in June whereby Baron Ungern-Sternberg was to march from Mongolia, whither he had fled . . . to seize Troitskasavsk, Verkhneudinsk (now Ulan-Ude), and Chita . . . The Japanese appear to have promised the Whites abundant munitions and supplies . . . It was the nearly unanimous opinion of Russian moderates and foreign observers that the accomplishments . . . if successful, were intended to be but the skeleton of a new state dominated by Japan."*

Baron Ungern-Sternberg, whom the Japanese picked for the job of forming the "Mongolo-Manchurian" state, was an old man in this part of the world. He had served in Siberia after the Russo-Japanese war and, during the Chinese Revolution of 1911, he was chief of the whole Mongol Cavalry. When the Russian Revolution occurred he identified himself so wholeheartedly with the struggle against the Bolsheviks that his cruelty and lack of principle had no equal in Russian Asia. In February, 1921, his army captured Urga (now Ulan-Bator) in Mongolia.

One month later, however, a Mongolian People's force occupied Maimaichen, and on March 21, 1921, the Mongolian People's Republic was proclaimed. Four months later the enemy was driven from Urga by Mongol, Soviet, and Far Eastern Republic troops (the Far Eastern Republic had not yet amalgamated with the Soviet Union), and in September Baron Ungern-Sternberg was captured and summarily executed. Soviet troops were not withdrawn until internal peace had been completely re-established.

Japan again turned toward Mongolia in 1931, when she

* George Stewart, *The White Armies of Russia* (New York: Macmillan, 1933), pp. 399-400.

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invaded Manchuria with the object of extending her conquests to North China and the Soviet Far East. Japanese-inspired incidents began to occur on the Mongolian frontier and have continued to happen ever since. From the outset the Soviet and Mongolian peoples realized that common measures of defense would have to be taken. So the Mongolian People's Army was strengthened, and a military academy was established for the training of officers at Ulan-Bator, the capital, staffed by Soviet army and air force officers.

In a discussion with Roy Howard on March 1, 1936, Joseph Stalin clarified the relationship of the Soviet Union to the Mongolian People's Republic. Said Stalin to Howard: "Should Japan attack the Mongolian People's Republic, threatening its independence, we shall have to assist the Mongolian People's Republic." A few days later, on March 12, the Mongolian People's Republic and the Government of the Soviet Union initialed a pact of mutual assistance, Article 11 of which reads: "The Governments of the U.S.S.R. and the Mongolian People's Republic are obliged in case of a military attack against either party to help one another with all means, including military assistance."

The Japanese, however, were not convinced of the efficacy of this pact. Tokyo decided to test the power of the Soviet-Mongolian mutual aid alliance and in May, 1939, Japanese troops were ordered to advance into Mongolia southeast of Lake Buir Nor near the Manchurian frontier. Fighting soon reached the proportions of full-scale warfare and continued for more than three months. The Japanese were badly beaten.

Since the outbreak of the present war, heavy Soviet reenforcements have been sent to Mongolia, amounting, it is

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believed, to several divisions of infantry, armored troops, and units of the air force. Led by Field Marshal Chang Kao-han, assisted and advised by Soviet officers, Mongolian veteran troops have proved themselves to be excellent fighters.

Before the revolution, Mongolia, nominally a part of China, was the scene of furious intrigue between Russian, Japanese, and Chinese agents, each trying to win the allegiance of the country. The people were illiterate, miserable, and poor. The country, centuries behind others in economic development, was ready for upheaval.

In 1917, the arats, hearing tidings of revolution in far-off Russia, rebelled against their native princes. From among them arose a number of youthful leaders, the most noted of whom was Suhebator, son of a poor nomad. When the arats were unable to achieve freedom by themselves in 1920, despite fierce fighting, they sent Suhebator to Moscow to seek Lenin's aid. The young man had to pass through the enemy lines repeatedly on his 3000-mile journey. Carrying the petition for assistance within the bone handle of his whip, Suhebator reached Moscow, talked to Soviet leaders, and accomplished his mission brilliantly. The U.S.S.R. recognized Mongolia's right to complete independence and sent help.

Suhebator did not live long after his return from the Soviet capital. He was poisoned by his enemies when only 23 years of age; his rawhide lash with its handle of bone occupies the place of honor in the National Museum of Ulan-Bator.

In 1924, the youthful Mongolian People's Republic effected a series of popular reforms with the aim of breaking down feudal social relationships and the domination of the country's economy by the lamas, who comprised nearly

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half the population. Upon the death of the influential Chief Lama, Bogdo-Gegen, in 1924, the separation of church and state was decreed. But this was easier said than done. Two years later the lamas still constituted 40.6 per cent of the population. Nevertheless, this measure broke the power of lamaism, and by 1935 only 10 per cent of the inhabitants of the Republic were lamas.

It is not difficult to realize why the elimination of the lama system presented such difficulties. Everything progressive was viewed by the lamas as "Russian Communism." They opposed progress by all means at their command.

"When some Lamaists have come in touch with Russian Communism," writes Alexandra David-Neel, "the result of these contacts has often proved amusing for the observer. A Buriat Lama whom I met at Wataishan was quite entertaining on the subject. 'The Reds,' he said candidly, 'say that everybody must work, and that he who does not work must not get food.' Such a doctrine appeared utterly distasteful to him. His view was that the 'superman' should be fed and provided for in all respects by the common folk. This view is upheld in a more or less extreme fashion by the great majority of the Lamaist clergy."*

Lamaism was more than a religion; it was an economic system in which one-half of the population lived at the expense of the other half. The lamas contributed little or nothing to the wealth and welfare of the population. The young republican government was not strong enough to decree the abolition of the lamaseries, since in attempting this it would have faced not only the opposition of the lamas, but of their families, especially of the rich and powerful landowners. Therefore, only restrictions were applied at first, and those lamas who wished to leave the

* Alexandra David-Neel, "Tibet Looks at the News," *Asia*, March, 1942.

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lamaseries were offered opportunities to make a living in the outside world. In 1929 the property and cattle of 670 big feudal estates were confiscated and distributed among arats and thousands of lamas who expressed the desire to enter worldly pursuits. At present more than 6000 lamas belong to production co-operatives, maintaining themselves and their families and contributing to the welfare of the country by livestock breeding and other useful activities.

The distribution of lands and cattle liberated Mongolia's economic energies. Under the direction of Soviet cattle-breeding experts, scientific methods began to be applied. In the past nomad arats drove cattle from pasture to pasture, trusting to luck and Buddha that their stock would survive. During the extremely cold winters hundreds of thousands of cattle and sheep perished for lack of fodder; as many died for want of water in the summer. But in 1924 hay was stacked on 50,000 acres of land, an acreage that increased to 500,000 by 1938. More than 15,000 wells have been drilled to relieve the animals' thirst in summer.

Nevertheless the economic advancement of the country was seriously held up by the complete lack of industry. In this the young Republic had to start from the very beginning. Considerable results have been achieved. At Ulan-Bator a leather factory and woollen and felt mills have been put into operation; they now give employment to 1500 workers. Small wool-washing plants have been constructed in many other localities. There are a score of power plants, telegraph offices, and waterworks.

Although formerly only camels were seen on the narrow winding and dusty caravan trails of the country, and even today no railway penetrates its territory, a network of motor highways is slowly expanding outward from Ulan-Bator. The most important of these is the highway from

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Buriat-Mongolia's capital, Ulan-Ude, running southward through Ulan-Bator to China. This is one of China's lifelines along which Soviet "lend-lease" aid to the Chinese republic has long been passing; a northern Burma road which the Japanese attacks of 1939 aimed to disrupt. Other highways connect Ulan-Bator with Dalai, Kosh-Arash, and the frontier defensive positions along the Manchurian border.

Where learning was formerly restricted to the Grand Lamas, with the bulk of the population entirely illiterate, there are now many schools for nomads, five newspapers, a national theatre, and radio and telegraph communications.

Despite its great distance from the western world the government of the Mongolian People's Republic appears to be fully cognizant of the issues of the present war. Thus, on the occasion of the Three-Power Conference in Moscow the Mongolian Ambassador to the Soviet Union conveyed the following message to the Soviet foreign minister: "The Mongolian people are marching in the same cause with you, and will do everything in their power to help strengthen the front that must result from the coalition of the three great powers—the U.S.S.R., Great Britain, and the United States of America—and the united front of all freedom-loving people that will forever destroy Hitlerism and insure independence to all peoples."

Tuva People's Republic

The Tuva People's Republic, with a population of only 89,000 sparsely distributed over an area of 78,120 square miles, is similar to Mongolia in structure, system and economy. Tuva is a very ancient state, mentioned in Chinese manuscripts as long ago as the seventh century of our era.

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Conquered by Genghis Khan in the year 1207, it was overrun by Mongols and Kirghizes and belonged to China until 1911. Then it was seized by the Russians; it was first made a protectorate and then a colony of Czarist Russia. Tuva's right to complete national independence was acknowledged by the Soviet Union in 1918.

Occupied mainly in cattle breeding, the Tuva people possess more than 250,000 head of cattle, 120,000 horses, and 700,000 sheep. Small-scale extraction of gold, silver, and salt comprises the chief industry. Highways connect the capital, Kyzil, with points within the Soviet frontier. Steamboat service has been in operation on the Yenisei river, which runs through the republic, since 1928, connecting the capital with Krasnoyarsk in Western Siberia.

In respect to the healthy and friendly relationship between the Soviet Union and the Mongolian People's Republic (as well as the Tuva People's Republic), Owen Lattimore, at present the American adviser to General Chiang Kai-shek, has this to say:

"The armed forces and political agents of the Soviet Union are not out to expand their sphere of control, but to ensure safety along their own frontier. To this end they sought to support those leaders of the Mongol people who acted for the interests of the Mongols and would not act to restore either Chinese or Japanese imperialism.

"The rapidity with which this policy was rewarded by the creation of a stable Mongol state was astonishing. There were moments of uncertainty, it is true. Most of these were connected with attempts by leaders of the aristocracy and high clergy to restore a colonial relationship with China. They failed because it had already become clear to the people that they now had a government which

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they could control themselves, but which they would lose if they allowed the Chinese trading interests, backed by Chinese warlords and working through hereditary Mongol princes and the great monastic foundations, to reassert their domination. The last Russian armed forces were therefore withdrawn as early as 1924, because it had already become clear that Outer Mongolia was prepared to defend its own independence.

"There have been internal troubles in Outer Mongolia since then, and even attempted rebellion. The crucial and really startling fact about these internal political developments is that they were the result, not of revolutionary policies injected by the Soviet Union, but of left-wing agitation by Mongols who were impatient of evolution and wished to leap forward to revolution. They failed largely because the kind of material and financial aid granted by the Soviet Union to the Mongol Government was not designed to foster revolution, but to make possible a kind of democratic republic, based in the first instance on the herding of livestock, but gradually acquiring its own industries for the processing of hides, wool, meat, and so forth, and also opening up mineral and other resources, and thus capable eventually of moving on to a socialistic order.

"Thus the processes by which Japan squeezes an imperial tribute out of the mines, industries, agriculture and railways of Manchuria are matched in Mongolia by Soviet loans without interest and the promotion of a course of development which will eventually give the Mongols social ownership of their own resources, without tribute to foreign investors. In the meantime, because the ability of the Mongol People's Republic to defend itself means protection of the Siberian frontier, the Soviet Union has helped

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the Mongols to equip and train their own army. Hence the radical contrast between the Japanese army of occupation in Manchuria and the Mongol army, officered by Mongols and skilled in the use of its own tanks, planes, and artillery, looking toward the Soviet Union for support, but capable of defending its own soil without orders from any foreign master."*

This contrast in relationship offers an important lesson to the peoples of Asia, and without doubt, as its principles are learned, Japan will find it increasingly difficult to maintain an imperialist domination over millions of subjugated Asiatic people.

But a greater lesson is offered the people of Asia by the development of the Buriat-Mongolian Republic, whose present prosperity and economic advance testify to success achieved in the application of Soviet policies to Asiatic conditions and populations.

* Owen Lattimore, "Where Outer and Inner Mongolia Meet," *Amerasia*, March, 1938.

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11

The Soviet Far East—Zone of Perpetual Preparedness

THE SOVIET FAR EAST EMBRACES MOST OF NORTHEASTERN Asia. From its northeasternmost extremity on the Bering Strait to its southwesternmost at Lake Baikal, the airline distance is 3,450 miles, and its winding Pacific coastline is nearly twice as long, for in that coastline there are three seas: the Bering, the Okhotsk and the Japan.

In the far northeast lies the Chukot Peninsula, reaching out at the Asiatic continent's end to within a few miles of Alaska. Southward, the coastline loops around the long, salmon-shaped body of the Kamchatka Peninsula, which juts southward into the Pacific almost to the northernmost of the Japanese-owned Kurile Islands. These islands block the free passage of ships across the North Pacific from America to the Maritime Territory and Vladivostok. They hem in the Soviet Maritime coast, off which lies the Island of Sakhalin, occupied jointly by the Soviet Union and Japan. Soviet Sakhalin comprises the northern half of the island above latitude 50° N. while Japanese Sakhalin, or Karafuto, is the southern half. Sakhalin is the only place where the Soviets share a common land frontier with Japan.

On the mainland of Asia, the Soviet Far East borders on Japanese-controlled Manchukuo along the Ussuri and Amur rivers, a frontier as long as the entire eastern front in Europe from Petsamo to the Sea of Azov. The Amur river itself, including the Argun, is 2800 miles long, and most of its upper portion constitutes the southern border

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SOVIET FAR EAST

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of the Soviet Far East. At Khabarovsk, where the Amur is joined by the Ussuri, a north-flowing river that forms part of the western border of the Maritime Territory, the east-flowing Amur turns north to flow through the Khabarovsk Territory and empty into the Okhotsk Sea.

We employ the term Soviet Far East in the popular sense to include all of Eastern Siberia with the exception of the Buriat-Mongolian and Yakutian Republics, although sometimes even these and the Irkutsk Region are included, being regarded as the "rear" of the "far eastern front." In this discussion, however, we regard the Soviet Far East as embracing the Chita Region and the Khabarovsk and Maritime Territories. Until three years ago, the Khabarovsk and Maritime Territories were subdivisions of what was called the Far Eastern Territory. They are separate administrative units today. The Khabarovsk Territory is, in turn, subdivided into the Jewish Autonomous Region, the Amur Region, the Lower Amur Region and the Kamchatka Region, within which are found the Koriak and Chukchee National Areas. The Khabarovsk Executive Committee has jurisdiction, also, over the industrial development of the Kolyma river valley, to the north of the Okhotsk Sea, where rich gold deposits are being exploited by a special administration known as the Dalstroi. Khabarovsk Territory is administered from the city of Khabarovsk. The Maritime Territory consists of the Ussurisk and Maritime regions and is administered from Vladivostok. On the east it fronts on the Japan Sea, on the west, Manchukuo.

With an area of 1,081,000 square miles, or seven times that of Japan, the Soviet Far East has a population less than one-twelfth that of Japan. The whole area east of Lake Baikal has today only six million inhabitants. At

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conferences and congresses in Moscow we were always able to recognize speakers from the Soviet Far East. No matter of what they spoke, with what they dealt, or what they discussed, the speeches almost invariably ended with passionate appeals for people. Not trained people especially, or specialists, or engineers in particular, but just healthy men and women capable of working, building, and tilling the soil. "Give us more people," the Far Easterners said, "and we shall show you how to build a new world." The Third Five Year Plan has attempted to deal with this problem in a realistic manner, by sending 600,000 industrial workers to Eastern Soviet Asia. The total of new settlers reached 800,000 by 1940. Many new people have also come to locate on farm land. By the resettlement, not of single families, but of entire groups of families from Central Russian collective farms, the newcomers are spared loneliness on arrival, which is an important factor. This kind of resettlement has been going on in the Soviet Far East for some years now; yet in 1940 it was said that "millions of acres of excellent pasture land must idly await the migration of large numbers of farmers from other parts of the U.S.S.R." That was before June, 1941; since then many additional thousands have been evacuated to the Far East from Nazi-occupied territory.

In 1939, the population of the Soviet Far East consisted of more than eighty nationalities, most of whom are provided with educational instruction in their native language. Thus there are Korean schools attended by 32,000 students, Ukrainian schools, attended by 35,000 students, and also Jewish, Chinese, German, Tatar, Chukchee, Koriak, Aleut, and other schools, in addition to the Russian. The total school enrollment is about one million. There are likewise Jewish, Chinese, and Korean national theatres

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which are reputed to have a high degree of dramatic culture.

Were the Soviet Far East to have a population of 20,000,000, instead of the present 6,000,000, Japan would think three times instead of twice before attacking the Soviet Union.

Beginning with the first Five Year Plan and increasing during the Second and Third Five Year Plans, industrial development in the Soviet Far East surpassed the rate of growth for all the rest of the Soviet Union. "The Far Eastern district," wrote the Soviet author, M. Sonin in 1940, "by the end of the Third Five Year Plan (1942) is to become an economically balanced, first-rate industrial region strengthening the economic and military power of the U.S.S.R. in the east."* Ten per cent of all capital investments in the U.S.S.R during the five-year period prior to this year (1942) were scheduled to finance construction in the Far East. By 1938, when large scale industry in the Soviet Union as a whole showed a nine-fold increase above 1913, industry in the Fast East showed a ten-fold increase. The per capita production of the new Far Eastern industries is above the average for the Soviet Union as a whole. After an exhaustive study, William Mandel, an American writer, wrote, "In order to meet the exceptional needs of the Far East in building materials, metal, and fuel, for defense and for the development of a virgin territory, it was felt necessary to create basic industries producing roughly two to three times as much per head of population as does the country as a whole."†

The Soviet Far East has abundant natural resources, as

* M. Sonin, "Soviet Far East," *Problemi Ekonomiki,* No. 3, 1940.

† William Mandel, "The Soviet Far East," *American Review on the Soviet Union,* February-March, 1942.

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we shall see, on which to found large industrial establishments in almost every one of its administrative areas. But most of the Soviet Far East is a trackless wilderness, with the temperature falling in winter to 80 or 90 degrees below zero in the north and 50 to 65 degrees below zero in the south, around Vladivostok, where the intense cold is moderated by moist Pacific winds. In summer, the temperature of Vladivostok rises often above 90 degrees. From the shores of the Arctic, swept by polar gales, the tundra extends far south into Kamchatka. The summer of almost continuous daylight brings a luxuriant growth of reindeer moss, called *yagel*, and in these tundra pastures one-third of Soviet Asia's reindeer are herded. South of the tundra, in the mainland of Asia, lies the taiga belt of coniferous forest swamp reaching as far south as the 50th parallel. Only in the fertile valleys of the Amur and Ussuri rivers are there magnificent stands of broadleaf trees and forests of cedar, oak, stone birch, and Siberian cork. In the south, or upper, Ussuri basin the vegetation is subtropical, and one finds the rare lotus, mulberry trees, and vineyards. But here, too, is forest wilderness in which abound bears, foxes, deer and the fierce Ussuri tiger, related to the Bengal species and caught alive by woodsmen who sell them for exhibition in zoos throughout the world. In the Soviet Far East the breeding of fur-bearing animals—sable, fox, and beaver—has become an important industry. Spotted reindeer are bred for their antlers, which are cut off in the spring and exported to China, where they are esteemed as medicine. But the forests themselves comprise one of the chief natural resources and are logged for the export timber industry.

The Soviet Far East has numerous mountain ranges, the watersheds of its meandering rivers. Except for Kam-

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chatka, where active volcanoes rise to 16,000 feet, the elevations range between 6,500 and 8,200 feet. Except in the Maritime Territory, where the chief inhabited centers are inland of the coastal Sikhota-Alin range, the mountains afford little direct protection from invasion. Elsewhere the inhabited points are either along the coast or, as in the Chita Region and Khabarovsk Territory, along the railway, which runs south of the Yablonovoi and Stanovoi ranges. These mountains run northeast and are a continuation of the Sayan mountains around Lake Baikal. Rivers drain the highlands north into the Lena basin and south into the Amur basin, where the most important industries of the Soviet Far East are concentrated. Chita region and Khabarovsk Territory front on Manchukuo across the Amur river itself.

Besides serving as a frontier, the Amur river is a waterway that was the chief avenue of communication until the building of the Trans-Siberian (Amur-Ussuri) railway in 1904. Even today it is chief among the Soviet Far East's navigable inland waters, which total 3,150 miles in length; it is open for navigation from five to six months of the year. Regular freight and passenger service is also maintained on the Ussuri river, the most important river of the Maritime Territory. River steamers can connect with Pacific vessels at Komsomolsk or Nikolaievsk, ports in the lower river.

If the river communications are extremely vulnerable to attack, the Trans-Siberian main line, which parallels the Amur and Ussuri (once even being called the Amur-Ussuri line to distinguish it from the Chinese Eastern railway), is no less vulnerable, for should it be cut at any point between Lake Baikal and Khabarovsk, the Far East would be cut off from rail communication with the in-

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terior of Siberia. The chief cities—Khabarovsk, Vladivostok, Komsomolsk—would be isolated. What is needed is a through railway passing east along the protected northern side of the mountains, and this is what the projected Amur-Baikal Magistral will accomplish. We have already described the western terminus of this line at Taishet, just west of Irkutsk; the eastern terminus will be the city of Komsomolsk, on the lower Amur. When completed, the Amur-Baikal Magistral will link all the chief cities of the Far East with Central and Western Siberia over a railway behind the mountains and some hundreds of miles north of the present Trans-Siberian railway.

Pending the completion of the new line, the Trans-Siberian has been double-tracked all the way to Vladivostok, with duplication of bridges, switches, block signals and water towers, as a precaution against bombing raids. The tracks have been heavily ballasted.

In addition to the Amur-Baikal Magistral, another strategic railway running north from Komsomolsk along the Okhotsk sea coast seems to be under construction. This line was projected as early as 1928; it is now evidently being rushed. On returning from the Soviet Union in August, 1941, Peter Rhodes, an American journalist, quoted a member of the Russian Young Communist League travelling on the same train as saying: "Another line is under construction even farther north, leading to ports far up on the Okhotsk Sea. It will eventually go up to the Kamchatka Peninsula and then along the coast of the Bering Sea." Of his informant, Mr. Rhodes said: "He was one of the thousands of youth who had volunteered for the vast construction program of Siberia, so I suppose what he said was true."*

* *PM*, August 11, 1941.

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Komsomolsk is said to have been connected recently by rail to the Pacific coast at the new port of Sovietskaya Gaven in the Maritime territory, far north of Vladivostok. New strategic highways have been built, chief of which is the 500-mile motor road between Vladivostok and Khabarovsk, which when completed in 1936 was traversed by a passenger car in 18 hours and by a truck in 30 hours. Similar highways link Khabarovsk to Komsomolsk, Sovietskaya Gaven, and Nikolaievsk. When we were in the Soviet Far East a highway westward from Khabarovsk was under construction as a link in a Trans-Siberian six-thousand-mile motor road from the Pacific Coast to Moscow. This highway, we have heard, is nearing completion, if it has not already been completed. Most of the motor roads run parallel to the railways and are used for short-haul freight traffic; they connect every important city and could function to great advantage for interurban transport even should sections of the railway be bombed out.

Airplane lines radiate from Khabarovsk in all directions. Moscow is only 48 hours away by scheduled airline; Petropavlovsk-in-Kamchatka is only four hours distant from Khabarovsk; another airline operates to the Kolyma gold fields and as far as Anadyr on the Bering Sea opposite Alaska. The locations of airports are a secret, but we do know that regular flights are being made daily to dozens of otherwise inaccessible communities. These airports offer convenient landing areas for the rapid air transfer of freight between the Soviet Far East and Alaska, Canada, and the mainland of the United States.

Chita Region

We travelled through the Soviet Far East in the spring of 1940, rolling eastward over the Trans-Siberian railway,

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the only open through line from Lake Baikal to the Pacific seaboard. After passing through the Buriat-Mongolian Republic, we entered Chita Region (population 1,100,000 in 1931).

Though the river beds were still frozen, there was little snow. Even the roads were dry, and we could see an occasional motor truck kicking up spring dust on a distant prairie-farm road. It is a peculiarity of the area around Chita that, although the thermometer is just as merciless there as elsewhere in Northern Asia, winter precipitation is slight, and high winds keep the land so free of snow that wheeled vehicles instead of sleighs are utilized all winter. Through the car window we saw extensive farm land, undulating southward from the Yablonovoi mountain ridge to the Amur river, on the other side of which lay Manchukuo. The rolling countryside reminded us of Illinois.

Chita Region has perhaps the largest farms to be found anywhere in the Soviet Union, the holdings per collective farm reaching 22,000 acres, a good-sized rural township in the U.S.A. By October 1940, these farms were being serviced by 2,616 tractors, 1,226 harvester combines, and thousands of machines for sowing, reaping and binding. The sown area, mostly in wheat, has more than doubled since 1913; there were more than a million and a half acres in 1939.

Agriculture is thriving throughout the Soviet Far East, to a great extent on land newly plowed by pioneer settlers and planted to wheat, rye, oats, rice, soya beans, sugar beets, and other crops. As against the 765,000 acres cultivated in the whole Russian Far East in 1904, 2,970,000 acres were cultivated in 1937. In the Amur Region alone in 1938 there were 2,000 harvester combines, compared to 400 in 1933. Most of the wheat is grown in the valleys

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around Blagoveschensk, the Far East's largest milling center, on the Amur river at the Manchukuoan frontier. The Russian economist M. Sonin reported in 1940 that the sown area in the Far East was almost 100 per cent collectivized, that the average area of a collective farm was 11,500 acres, and that the level of mechanization of agriculture was among the highest anywhere in the Union. Practically every collective farm was served by a Machine-Tractor Station; in 90 per cent of the major agricultural operations, tractors and combines were being used.

As we sped across the Chita Region from time to time a prosperous village with an old fashioned Russian church flashed by, and besides the railway at one place we saw an old exile trail, which brought the first settlers under guard into the wilderness. When we arrived at the capital Chita (population 102,555 in 1939), we learned that it had been founded by Decembrists who were banished from St. Petersburg in 1825. At various places along the railway we could see warehouses under guard. These undoubtedly housed war supplies for, in addition to the guards on the ground, patrol planes were sweeping back and forth overhead. It became increasingly apparent that Chita Region is very important to the defense of the Soviet Union, protecting the flanks of the Soviet Far East from attack. Near the city of Chita a railway spur could be seen branching southward. "It goes to Manchukuo," said the conductor. "There it joins the Chinese Eastern railway." Almost directly south of Chita lay the frontier positions that were the scene of the border conflict in 1939, when the Japanese-Manchukuoan forces were defeated by the Soviet-Mongolian troops.

The Chita Region has recently been heavily industrialized; it now has eight large enterprises. One of them, the Chapcherginsk Tin Combinat is largest; it is said to

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produce 65 per cent of all Soviet tin. The Region is one of the largest producers of gold in Soviet Asia. Coal is mined at Chernov, Arbagar, and other points. There are also deposits of wolframite, molybdenum, arsenic, marble, and other valuable natural resources, among them the forests of pine, larch, cedar, and fir trees, which cover nearly half the area.

Without time to get off the train, we passed through Petrovsk-Zabaikalsk, where an old iron works had been completely reconstructed with two open-hearth furnaces and a gas-generating plant. At these mills the Soviets produced their first steel in the Trans-Baikal Area a few years ago.

Beyond Chita we passed Skovorodino, an obscure town where Soviet scientists have been studying the permanently frozen subsoil. "If you dig down a few feet," we were told by a fellow passenger, "you will reach ice that has not thawed since the Glacial Age. Crayfish dug out of test pits where they have lain in frozen ground for millenniums have been restored to life in the laboratory. This frozen subsoil creates a serious shortage of water; unfrozen ground water is rarely found. Formerly this problem was met on the railway by using water-tank trains to service locomotives. Today the new tender-condenser type of engine is employed. It can run 700 miles without stopping for water."

Near Skovorodino is the town of Bolshoi-Never from which an all-weather motor road runs north across the mountains to Yakutia.

Jewish Autonomous Region

After travelling more than 250 miles east of Chita, and before reaching the city of Khabarovsk, we passed through

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the Jewish Autonomous Region, which is part of Khabarovsk Territory. At the capital city, Birobidjan, we noted a new railway station, whose spacious structure, boldly lettered in Yiddish and fronted with flower beds, made it conspicuous among the many old-fashioned depots still found along the Trans-Siberian line east of Lake Baikal. At one time on the site of this modern station stood the miserable little railway station of Tikhonkaya.

In 1928, after its organization, many thousands of Jews migrated to the Jewish Autonomous Region (often called Birobidjan) from the western districts of the Soviet Union. At first their difficulties were great. Tailors, small merchants, shoemakers, unaccustomed to hard labor, found the toil of clearing the forests and plowing the virgin soil almost too hard to endure. By 1938, however, more than 20,000 Jewish working people had settled in this new national homeland, which had become a region in 1934, and 50,000 acres were under cultivation. Industry, too, had begun to thrive. Iron ore has since been found at Kimkan, and gold mining and lumbering have been introduced. Five brick kilns, a lime plant, wood-working shops and clothing mills were operating at Birobidjan.

"Why aren't there more Jews in Birobidjan?" we asked a school teacher, also travelling to Vladivostok.

"Why should they come here?" he countered. "Jews in the Soviet Union are not discriminated against in any way. They possess absolute equality. Most, including myself, do not see any reason for leaving our homes, wherever they may be, just to go to Birobidjan."

"In that case why have Birobidjan?"

"The case is different with the Jews in Eastern non-Soviet Europe," he said. "Many of them long to live in

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peace and security among their own kind. The Jewish Autonomous Region is their refuge."

He then went on to tell us that the inhabitants were preparing to receive 50,000 immigrants by 1940. He did not know, of course, that thousands of Jews were going to be driven out of Poland and other areas by the Nazis, many to find a haven in Uzbekistan and the Jewish Autonomous Region.

Khabarovsk Territory

While going through the Jewish Autonomous Region we were already in Khabarovsk Territory, the largest administrative division of the Soviet Far East. Here we observed, as throughout the Soviet Far East, no borderline between civilian and military pursuits. Even farms along the frontier were occupied by Red Army men who, having completed their obligatory military training, had settled permanently on the land, ready at an instant's notice, however, to exchange the plow for the sword. Our locomotive, we observed, was manned by Red Army men.

"Fine lads," our conductor said, jerking his thumb forward toward the engine. "They know what they're doing, and they'll lick the tar out of anyone who tries to take our soil." He was an Ukrainian, formerly a trackwalker, overlord of one kilometer of track. To the east and west of him were other trackwalkers, each with his kilometer to guard, all the way across Soviet Asia: 8,000 kilometers, 8,000 trackwalkers. Now, promoted to conductor, he rode almost from one end of the U.S.S.R. to the other. Twenty-five days was his round trip; then he rested for twenty-five days.

At every station, at every bridge and culvert, there were

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guards. Their numbers increased as we passed Nerchinsk, beyond which the tracks ran close to the Manchukuoan frontier all the way to Vladivostok. While rolling through pleasant valleys, we were entertained in the dining car by radio music, broadcast from Moscow and picked up by the train's receiving set. At breakfast we listened to midnight shows, for in travelling east we had moved some eight hours nearer to daybreak. Moscow was far away, but never absent in the minds of the people.

As we were crossing the Amur river, before entering Khabarovsk on one of the longest spans in all Asia, we saw apparently endless rafts of logs floating down the river toward sawmills in the lower Amur. The growth of the lumber industry, as we learned later, has been marked since 1929, when there were 70 sawmills. By 1937, their number had more than doubled, to 160 sawmills.

The city of Khabarovsk lies a short day's ride from Birobidjan, but it is more than 5,000 miles east of Moscow. When the train stopped, we got off to stretch our legs, sauntering into the railway depot. A mural showed three bearded horsemen emerging on a vast fertile plain. "Yerofei Pavlovich Khabarov," read the inscription. Khabarov led the first Cossack band that explored the Amur river to its mouth, reached in 1651, and legend has it that he spent the winter at a camp near the site of the city that keeps his name alive.

At Khabarovsk (population 199,364 in 1939) is one of Soviet Asia's few oil refineries, as well as a cracking plant that converts Sakhalin crude oil into motor and aviation gasoline and fuel oil. The city also has plants of the Far Eastern Farm Implement Trust, and, as in the United States, where every plant of this type is producing cannon, tanks, and other war equipment, the Khabarovsk plants

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are engaged in war production. A large machinery plant has recently been built at Khabarovsk.

A railway spur leads north from Khabarovsk along the Amur river to the new city of Komsomolsk, the most important industrial center of the Soviet Far East. Known as the city of youth, Komsomolsk typifies the new Soviet Asia better than any other community east of the Urals. A city of 300,000 inhabitants by latest report,* it was built entirely by members of the Young Communist League, 60 per cent of the population being under 30 years of age. In it are big shipbuilding ways and steel mills and a new petroleum refinery. The Komsomolsk brick kilns produce six million fireproof bricks a year. It was at Komsomolsk that the first warships (probably destroyers) built by the Russians in the Far East were launched in the summer of 1939. It is reported that the Amur Steel Works at Komsomolsk produces more than 750,000 tons of finished steel products a year.

In building the Amur steel works, machinery of Soviet manufacture was brought in from Leningrad, Gorky, and Magnitogorsk to erect open-hearth furnaces, coke ovens, rolling mills and a heat-and-power plant. Situated on the banks of the Amur, the mills produce both rolled and ingot steel, as well as coke and chemicals. Coal for the furnaces is obtained from the Bureia deposits, estimated at 1,000,000,000 tons of coking coal, at the headwaters of the Bureia river, to which a railway spur has been driven from Komsomolsk. This spur may be one link in the Amur-Baikal Magistral under construction at the present time.

Proceeding north down the Amur from Komsomolsk, one reaches the town of Nikolaievsk, a famous old Russian

* William Mandel, "The Soviet Far East," *The American Review on the Soviet Union,* February-March, 1942.

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town and Pacific naval base, near the mouth of the Amur. Here are plants auxiliary to naval construction, an oil refinery, and the terminus of a pipe line that carries refined gasoline upriver to Komsomolsk. The crude oil is shipped from Sakhalin by tanker across the narrow Tatar strait. Nikolaievsk also has fish canneries, which process the salmon and other fish from Far Eastern waters.

One of the most interesting industrial developments directed from the administrative center of Khabarovsk lies farther north than Nikolaievsk, in fact north across the Okhotsk Sea from this port. It is called the Dalstroi (Far Eastern Construction Agency) which has jurisdiction over a territory larger than that of England, France, Germany, Belgium, and Holland combined. The Dalstroi development lies in the upper Kolyma river valley, reached by a motor highway, reported to be 940 miles long, running across the mountains from the new city of Magadan, near the port of Nagayevo at the head of the Okhotsk Sea. This highway reaches into the upper Kolyma valley, and it may be extended into the Indigirka valley. To provide overland transport in winter, when the Okhotsk Sea is frozen, a paved highway is being laid to connect Magadan with the auto road running north into Yakutia from the railway near Skovorodino. A railway to connect with the Trans-Siberian is also under discussion.

The reason for all this construction is that the Kolyma basin has been found to be Soviet Asia's richest gold-producing region, now mining one-third of the Soviet Union's annual gold production, which is generally estimated at between $300,000,000 and $400,000,000. The yield here is rising steadily as gold dredges and hydraulic methods of mining are used. Gold is also obtained at the headwaters of the Amur river, along the Zeah river in the

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taiga, and even in the craters of extinct Kamchatkan volcanoes.

Maritime Territory

On leaving the city of Khabarovsk, the train headed south on the last 500-mile leg of the Trans-Siberian journey to Vladivostok.

"We are entering the Maritime Territory," said the Red Army commander as we peered together out of the car window. "This is my stamping ground," he added. "I've been stationed here seventeen years, and I love this country. Often, on my day off, I take a rod and reel and go angling on the Ussuri river. That is, of course, when we're not fighting the Japanese."

We gazed on farm lands stretching far away over the fields besides the railway; tractors could be seen drawing gang plows and harrows in preparation for the spring sowing. It was April, and the sowing season begins earlier than in Moscow, for the Maritime Territory lies within latitudes as far south as the Crimea. Being near the Pacific it has a monsoon climate.

"Delightful countryside," we remarked.

"And fertile, too," said the Red Army commander. "Two crops a year can be grown in the south. Out here, we call the Ussuri river basin our 'Maritime granary.' Grain, soya beans, rice, and sugar beets are cultivated. More could be produced, but we need more people. We recently put up a large sugar refinery. It's only working at half capacity. Not enough sugar beets are grown. But we are building for the future."

"And for defense, too?"

"Defense, indeed!" he replied. "That's why we've built those large steel mills at Komsomolsk, and our other new

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industries. They are defense industries, and they will be bigger than they now are. We double-tracked the Trans-Siberian, and before we have finished we will have put down four tracks. This is our land. We intend to hold it, and we are preparing even for a state of siege. Our industries are supplied from local resources. Can you see those hills off to eastward?"

We looked out toward the Pacific, to glimpse mountains hazy in the distance.

"That is the Sikhota-Alin mountain range," he went on. "We call it the 'Pacific Ocean Urals.' It runs north and south the length of the Maritime Territory, and although our geologists have explored only eight per cent of it, what they have found in mineral wealth would fill a book. There's where we get the iron ore and the manganese for our steel mills. There, too, is coal for our mills and railways. We mine tin, lead and zinc, gold, silver, mercury, molybdenum, and platinum, and we quarry fine marble and process graphite. The location of some rare deposits has been known for a long time."

"Yes, we have read about the zinc and lead mines near Tetukhe Bay," we replied, "and we have heard about the tin and molybdenum deposits at Sinachin and Umaltin."

"They are no longer mere deposits," he retorted. "We have built mines to extract the ores and mills to refine them. The Sikhota-Alin Combinat at Tetukhe is one such plant. But would you imagine? With all this wealth in the ground, not only the Maritime Territory but the whole of the Far East of our country used to import coal until a few years ago. Why, here we literally walk on coal beds. I recall that during the fighting around Lake Khassan or what you call Changkufeng Hill, one day a Red Army cook ran out of coal for the camp kitchen. It was in the

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Posetsk district, where coal beds crop out of the ground. Well, all he needed to do was send out a detail to dig fuel from the ground. The coal mines now produce enough for all local needs—we certainly are not allowing our mineral wealth to lie idle. We are stocking up to be ready for a state of siege if that is forced upon us. But I must stop talking now and collect my baggage—the next stop is where I get off."

The train was slowing down, and the town at which it halted was Voroshilovsk (population 70,628 in 1939). Here the Red Army commander left us, but before he did so he found time to tell us a little more about coal, and something about iron.

"By 1941," he concluded enthusiastically, "we shall be producing so much coal that we will not need to import any more from the west, thus releasing railway freight cars for other uses. And as for iron! Our iron ore reserves, located mainly near the Amur river mouth, at Suchan and at Malo-Khingan, are estimated at 600,000,000 tons! That will last us a while, won't it?" he asked, and grinned. Then he shook our hands vigorously, picked up his bags once more, and stepped down to the station platform.

Shortly before reaching Vladivostok, we passed through the city of Spassk, the site of the cement works that until recently produced most of the cement consumed in the Soviet Far East. This was so in 1937, when 164,000 tons were produced; but the 525,000 tons of cement to be produced this year (1942) will come largely from new plants at Khabarovsk, Komsomolsk, and Londoko in the Jewish Autonomous Region.

Produced locally, the cement is consumed in Far Eastern construction, not the least of which has been the building of frontier blockhouses and concrete gun emplacements.

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The terrain of the Maritime Territory is naturally adapted to border fortification. When the Japanese assaulted Changkufeng Hill, more than a hundred miles south of Vladivostok, it was said that they sought this eminence because it afforded a view of the coastline all the way to Vladivostok. In passing through the Maritime Territory, we observed many moundlike hills of natural formation, called *sopki* by Far Eastern people. It would not be surprising to learn that these have been fortified to command wide reaches of the surrounding plains.

In approaching Vladivostok, the train passes down the north shore of a broad bay, and we could see that the bay shore was a summer resort center, for there were numerous suburban villas and cottages. Closer to the city, the railway skirts extensive shipyards said to be equipped for constructing warships, although the biggest naval shipyards are not located here, since the region of Vladivostok is relatively more vulnerable than is, say, Komsomolsk-on-the-Amur. Shipbuilding for merchant, fishing, and naval fleets, nevertheless, is one of Vladivostok's most important industries.

Night fell as we drew near the city, obscuring the view until we saw, as we came in over the hills, only the lights of the city. At 9 P. M. we completed 216 hours of train travel across Siberia from Moscow by rail. Emerging from the station, to take our place in line for a taxi, the first object we saw was a huge statue of Lenin, outlined in bold relief by bright reflector lights. In a few minutes we were in a taxi on our way to a hotel not far from the station, where the accommodations were excellent. For ten days this became our home, while we waited for the semi-monthly steamer to take us to Japan for embarkation for the U.S.A.

In 1940, Vladivostok had a population in excess of

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200,000, not counting the army and naval garrisons. The city has grown immensely since 1926, when the population was half the present figure. This rapid growth was evident in many new five- and six-story buildings and large factories.

We thought our movements about the city would be circumscribed, but we were allowed to walk about at will. When we spoke about the matter to a local resident, he remarked, "What can you see on Vladivostok's hills that the Japanese don't know perfectly well? Don't you suppose they know how high they are, and how many there are and which would be most suitable for fortification? They held the city under military occupation for almost four years after 1918. Other foreign military experts have been here, too. No, you could not tell our enemies anything about the topography of Vladivostok that they don't know already."

So we walked about unmolested, except that we could not pass by the barbed-wire entanglements that had been erected around the tops of the numerous hills. Presumably they enclosed heavy gun emplacements for protecting the harbor entrance from invasion by sea, and the city itself from air raids. Some batteries installed in the Soviet Far East have been described as being equipped not only with long-range coastal artillery but with anti-tank and anti-aircraft guns as well.

The view of the terraced hillsides and of the beautiful harbor from the hilltops was superb. There are many inlets in Golden Horn Bay, providing deep and sheltered anchorage for the fleet, and while we were in Vladivostok some American ships came into the harbor, guided there by a naval pilot because the harbor had recently been mined.

While in the city we could not but note the abundance

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of seafood served in restaurants and on sale in the many food stores. We tasted the delicious Pacific Ocean crab, fresh caught and boiled to a deep red color, and sampled canned fish of every description, attesting to one of the Soviet Far East's major industries and a major item in Soviet-Japanese trade rivalry.

The Pacific coastal waters, as well as the Amur and Ussuri rivers and Lake Khanka (fifth largest in Soviet Asia, 1,538 square miles and a spawning ground for salmon) are exceptionally rich in edible fish, 60 per cent of which are salmon. More than 50 shore and 20 floating canneries handle the annual catch of over 200,000 tons; in Kamchatka crabs and lobsters are canned for export to the United States.

The Far Eastern Fisheries contributed one-quarter of the total fish catch in the U.S.S.R. in 1938, when the Soviet output was 1,500,000 tons or one-third of the world's catch. In 1940, thirty per cent of all the fish caught for the market in the U.S.S.R. came from the Far East, where the annual catch of fish far exceeds the local demand and constitute's the region's chief export commodity.

But these Far Eastern fisheries, including the use of the mother-ship technique for deep-sea fishing and the development of large mechanized shore canneries along lines similar to those employed by the modern Alaska salmon fisheries, are a recent Soviet achievement. In the past the Japanese dominated the area. They had little competition because the Czarist government was content to collect rental fees on the fishing lots and did little to develop fishing by Russians.

The majority of fishing lots, or reserved fishing grounds in territorial waters off the Siberian coast within the 12-mile limit recognized by the Russian government, were

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rented annually to the Japanese and a great part of what Russian-operated fisheries there were was financed and equipped by the Japanese, who had the advantages of nearby markets, an adequate labor supply, and cheap transportation. By 1920, in the period of military intervention, Japan was virtually in control of all the fisheries in waters off the Siberian coast and Kamchatka, and also operating numerous shore establishments.

This situation did not change until after 1925, when diplomatic relations were established between Japan and the Soviet Union. Both countries then expanded their fisheries. The Soviets did so tenfold, until, by 1939, they had reserved for themselves 436 lots. The Japanese expanded their fisheries from 229 lots at the beginning of 1925 to 359 lots in 1939. But, whereas in 1925 the Japanese share was 88 per cent, in 1939 it was only 40 per cent of the fishing lots in use. While not denying Japan's right to fish in the waters of the Okhotsk, Japan, and Bering Seas, the Soviets have, by enlarging their own fisheries, gradually ousted the Japanese from strategic waters along their own coast. After much diplomatic friction, the Soviets decided to renew the fisheries agreements only on a yearly basis, and since 1928, the Soviets have completely dispensed with Japanese labor in the fish canneries along their Pacific coast. The Japanese seasonal workers in 1932 were only 4.4 per cent of the total, as against 53.3 per cent in 1928. This percentage has undoubtedly been further reduced, and to offset this labor loss a resettlement program has been carried out. That is to say, whole colonies of fishermen from Astrakhan on the Caspian Sea and from the Black Sea coast have been transferred to new permanent settlements on Kamchatka. After the Japanese attacks in the summer of 1938, a resettlement in the opposite direction was also carried out: all Asiatics who were sus-

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pected of sympathy with Japanese imperial ambitions were removed from the Soviet Far East to the interior of Central Asia.

In addition to expanding their fisheries, since 1928 the Soviets have taken over the whaling formerly conducted in the Bering Sea by Norwegian interests under a concession agreement. Whales are now hunted by a large flotilla, consisting of the mother ship *Aleut*, equipped for processing the oil and hides at sea, and several chaser boats armed with harpoon guns. Soviet whaling is a thriving industry today, but not regarded with much favor by the Japanese who also send out whaling vessels.

Vladivostok is the chief naval base on the Maritime coast, but other ports are being developed; one of them is Sovietskaia Gaven (Soviet Harbor) about five hundred miles north of Vladivostok, which will be the eastern terminus of the Amur-Baikal Magistral. Formerly an uninhabited bay, Sovietskaia Gaven now has ship repair yards, and a fish cannery with an output of 2,100,000 cans a year (ten tons a day). The fishing fleet based here has seven vessels called drifters. The cannery has its own electric power station, cold storage plant, and by-products plant. The population was 10,000 in 1940.* Across the narrow Tatar Strait from the Maritime coast lies the Island of Sakhalin. Steamships make regular trips from Vladivostok to Sakhalin, Kamchatka, Kolyma, Chukotka, and the north arctic coast. Like Petropavlovsk-in-Kamchatka, Vladivostok is an eastern terminal port for the Northern Sea Route.

Soviet Sakhalin

The island of Sakhalin, less than 20 miles wide in some places, is occupied jointly by the Soviet Union and Japan; Soviet Sakhalin comprising the northern half above lati-

* *Pravda*, July 15, 1940.

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tude 50° N., and Japanese Sakhalin, or Karafuto, the southern half. Japan was obliged to return the northern half of Sakhalin to Russia by the terms of the Portsmouth Treaty in 1904, at the conclusion of the Russo-Japanese War. During the period of military intervention in the Russian Far East, from 1918 to 1925, Japan held the whole island under military occupation. The price for her withdrawal from the northern half in 1925 was half of the Sakhalin oil output, and this half still goes to Japan. In some parts of the island Japanese-controlled wells are found side by side with Soviet-operated wells.

In 1941 the total output of oil in the Soviet Far East was reported to be 700,000 tons,* the bulk coming from Sakhalin, where the Soviet output by the latest available figures was 360,900 tons in 1938, having risen from 17,600 tons in 1929.† The Sakhalin oil reserve is estimated at 300,000,000 tons. Some years ago, to eliminate the shipping of oil from the open east coast port of Okha, the Soviets laid an oil pipeline from the producing wells across the island to Moscalvo on the sheltered west coast. Here tankers load oil and carry it to Khabarovsk via Tatar Strait and the Amur river. But ice closes the Tatar Strait six months of the year. So, according to recent report, the pipeline has been extended across the strait to Nikolaievsk on the Amur, providing an all-weather delivery system.

In order not to rely too heavily on Sakhalin for oil, the Soviet Union has taken steps to develop other oil reserves in Kamchatka and along the lower Amur river, which accounts for their rising percentage of total Far Eastern out-

* *Russia at War,* a publication of American-Russian Institute, New York, Dec. 11, 1941.

† William Mandel, "The Soviet Far East," *American Review on the Soviet Union,* New York, February-March, 1942.

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put. As an added precaution, the Soviet Union has projected for completion this year (1942) synthetic fuel plants, which will operate on the abundant coal deposits of the Far East.

The Soviets, however, are not wholly dependent on oil to operate their motor vehicles. New cars with gas-generating equipment have been developed to be run on wood, charcoal, and peat fuel. A test run in Siberia in 1940 demonstrated that these new motor cars are not only cheaper to operate but can be driven successfully across roadless country where there are no filling stations. A ton-and-a-half truck can run 65 miles on about two bags of dry wood chucks, each chuck about the size of a toy building block, and wood is abundant in the Far East. The Soviets are making gas-generating vehicles in mass production.

Besides oil, Sakhalin produces coal for Far Eastern shipping. A narrow-gauge railway and motor roads connect the Derbinskoye and Arkovsky coal mines with a bunkering station on the Tatar Strait. In 1940 the output of Sakhalin coal was said to have increased forty times during the preceding 12 years.* In 1931 the output was 215,400 tons.†

The system of motor roads linking towns in the interior of the island passes over hilly terrain, where trucks must go upgrade in low gear, through forests of larch and cedar being felled now for the local timber industry. The road also passes through the fertile Tym river valley, where dairy, stock, and grain farms produce fresh foodstuffs for the urban population. At these new farms the aboriginal Nivki people, who formerly lived only by fishing, now engage in agriculture as well. The native inhabitants, in-

* *Russian Economic Notes,* August 15, 1940

† *Dalnevostochnii Krai v Tsifrakh,* a handbook (Khabarovsk, 1932).

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cluding the Giliaki and Orochans, now number about 6000. Of their homeland, they sang in the old days:

"Sea all around and a mountain within;
Waters surround and misfortune's within."

Under Czarist rule Sakhalin was the "Devil's Island" of the Empire, a notorious penal colony. Few survived imprisonment there. The total population, when the Soviets first gained control in 1925, was given as about 10,000; in 1936, it had increased tenfold,* due largely to an influx of workers in the oil, coal, timber and fishing industries. The oil center of Okha, an east coast port, had a population of 17,000 by 1933; Alexandrovsk, the capital, a west coast port, had 18,000 in 1937. Soviet Sakhalin as a whole has a population larger than Alaska's 73,000;† as in Alaska, many of the inhabitants engage in the fishing industry.

With the rise of purse seines and mother-ship techniques the native fishermen of Sakhalin began to replace their sailboats and rowboats with the motor *kavasaki*; a new dockyard produced twenty modern vessels in the winter of 1939-40.‡

As for communication with the mainland, a Sakhalin miner said recently in Moscow: "The island has a big radio station, and planes fly daily from Sakhalin to Khabarovsk and Vladivostok."§

Kamchatka

Japan's entrance into World War II in December, 1941, threw into sharp perspective a portion of the Soviet Far

* Nicholas Mikhailov, *Land of the Soviets* (New York: Lee Furman & Co., 1939).
† *Russia at War*, February 28, 1940.
‡ *Izvestia*, May 18, 1939.
§ *Moscow News*, Oct. 24, 1940.

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East, upon the Soviet control of which depends in great degree the safety of the Alaskan coast. This is the Kamchatka peninsula, with an area of more than 250,000 square miles, lying between lat. 51° and 60° N.

The terrain is mountainous, with two parallel ridges running N.N.E. and having a valley between through which the Kamchatka river flows from headwaters in the high mountains surrounding Petropavlovsk north to the sea, forming the most fertile farm land in the region. The loftiest peaks in the Soviet Far East are in the Eastern Kamchatka range, rising to a maximum height of 16,000 feet in the majestic Kliuchev volcano, where red-hot lava erupts to melt what would otherwise be eternal snow on the summit. Only recently (1936) was this volcano first scaled by man. Soviet scientists then descended into the crater on an exploratory expedition. This volcano, called "Burning Mountain" by the natives, is visible for hundreds of miles along the Kamchatka coast. There are eighteen other active volcanoes in Kamchatka; among them is the noted Avachin, which rises 9,000 feet just twenty miles inland from Petropavlovsk on Avachin Bay.

Until recently, Kamchatka although early explored by the Russians was a remote, outlandish place. In the words of one of its early explorers, Professor Krashennikov, "It was more suitable for the habitation of animals than men." Today, however, with its wild, rugged scenery and abundant geysers and hot springs, it is on the way to becoming a delightful resort center. The chief industry is fishing, employing most of Kamchatka's inhabitants, who numbered 28,000 in 1933, of whom 7500 were living in Petropavlovsk, which is the capital and also the largest Soviet port in the North Pacific.

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Petropavlovsk was discovered and first occupied by Russians more than 200 years ago; it derives its name from the two ships *Peter* and *Paul* in which Captain Vitus Bering set forth in 1741 on his voyage of discovery to Northwest America. Petropavlovsk today is a Soviet naval and air base, equipped with a floating dock capable of handling 5000-ton vessels. It has new shipyards, a can factory, a power station, cold-storage and fish-curing plants, and a highly mechanized fish cannery. Its powerful radio station maintains contact with Moscow, 8000 miles away; whole blocks of new apartments have been built, and motor cars roll through the streets.*

One reason given for the construction of a railway along the Okhotsk coast is that it will link Kamchatka with the Trans-Siberian, thus providing convenient land transportation among the numerous fishing settlements on the west coast, which will enable them to prolong their fishing season by several months. The autumn storms along the west coast make it dangerous for vessels to operate, and as long as the fishing settlements must rely solely on sea transport, they must get all their fishing done in the short summer. Another reason hastening its construction today is that the harbor of Petropavlovsk is ice-free because of the warm Japan current, and the port may be used as a receiving point for shipment of war supplies from the United States to the Soviet Union. The route and progress of this railway to Kamchatka have not been disclosed; but it is known that a motortruck road leads from Petropavlovsk inland across the mountains to the west coast of the peninsula. Thus far, this road has been used to supply the west coast fishing settlements. Apart from fish, some gold and also oil

* *Moscow News*, Oct. 24, 1940.

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are being obtained from Kamchatka. The oil deposits were discovered in 1922, but wells were not sunk until recently.

At one time there was only one doctor in the whole peninsula of Kamchatka; today there are more than one hundred medical centers. There was no education at all; now the children of many nationalities: Kamchadals, Koriaks, Chukchees, Yukagirs, Eskimos, Lamuts, and Aleuts, attend elementary and secondary schools.

Kamchatka itself is an administrative region of the Khabarovsk Territory and is, in turn, the administrative center for the Verkhoturov, Karaginski, and Kommander Islands in the North Pacific. All of these islands are now employed by the Soviets as game preserves for sable, the Kamchatka blue fox, and other rare animals; the Kommander Islands are particularly famous for the rare Pacific fur seal and the rarer sea otter.

Strategically, the Kommander Islands are comparable to the nearby Aleutian chain. But for 150 days of the year, they are so blanketed by fog that the inhabitants (352 in 1936, mostly Unangans*) almost never see a clear sky. Two islands comprise the Kommander group, one called *Medny* (copper) because of what were thought to be important copper deposits, and the other *Bering*, after the discoverer of Northwest America. Bering died on the island in 1741, and his grave is marked by a simple wooden cross.

To provide a livelihood for the natives, 30 reindeer were introduced in 1927, multiplying to 300 by 1937. Both islands have schools, and on Bering island there is a hospital. In addition to furs, an important product obtained on the islands is seaweed, which grows to gigantic size off the coasts and is gathered for the production of agar-agar and iodine.

* M. A. Sergeyev, *Sovietskii Ostrovo Tikhovo Okeana* (Leningrad, 1938).

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Chukchee National Area

Another administrative unit of Khabarovsk Territory is the Chukchee National Area, comprising the whole northeastern land's end of Asia, a region as large as Egypt, but inhabited by fewer than 15,000 people. The terrain is mountainous, rising to 6500 feet in the Anadyr range, which is linked both to the Kamchatka volcanic region in the south and to the complicated Stanovoi-Kolyma system in the west.

It was over this remote region that the American pilot, Jimmy Mattern was flying when he came down along the Anadyr river in a forced landing during his lone round-the-world flight some years ago. So sparsely populated was the country that it was more than a week before he was found by natives and brought to Anadyr, where a Soviet plane flown by Sigismund Levanevsky picked him up and brought him to Alaska.

The Chukchee people have shared in the general development of the north as a result of the opening of the Northern Sea Route and are represented in the Supreme Soviet of the U.S.S.R. by an elected delegate, Tyvlianto.

We have reached the continent's end in Soviet Asia. Across the Bering Strait eastward from here lies Alaska, 56 miles away. Behind us is the whole of Siberia, extending westward to the Ural mountains, where our long trek began. We have described the Chukchee National Area last, after Khabarovsk, after Petropavlovsk; but in history the early Cossack conquerors of Siberia, working out from the Yakutsk ostrog, exploring down the Lena and finding their way into the Yana, Indigirka, Kolyma, and Anadyr river valleys, reached this land before exploring Kam-

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chatka or the Amur Valley. They came to Anadyr with Semeon Dezhnev in 1648, a century before Bering founded Petropavlovsk, but they did not know a whole continent lay across the narrow water.

Many of us have likewise been blind about the vast Siberian mainland, never far away from our shores. Today, however, Siberia is no longer a remote, outlandish place, far removed even in imagination. But to appreciate the vital importance of Siberia in north Pacific defenses today, we shall have to go on a brief excursion in history.

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12

Siberia in World Affairs

RUSSIA EMERGED ON THE PACIFIC SEABOARD THROUGH SIBERIA and the acquisition of Siberia made her a power in Asiatic affairs. Russian influence in the Pacific is exercised through Siberia, and whenever North Pacific problems have engaged world-wide attention, the question of Siberia has been in the forefront. But the role of Siberia in world affairs has varied with the times.

The course of Russia's history as a Pacific power may be divided roughly into four periods. The first period, from 1600 to 1850, was one of expansion across the whole of northern Asia and on to the northwest of the American continent, chiefly in pursuit of furs. The second period, from 1850 to about 1900, was one of retreat from North America and expansion southward on the Asiatic mainland, with the search for warm-water ports as the dominant motive, particularly in the Far East. The third period, from 1900 to 1917, was one of retrenchment, with exploitation of territory through railway concessions and general decline of Czarist Russia as a sea power. The fourth period, from 1917 to date, has been one of intensive internal development of the rich natural resources that Siberia or, to be specific, the Soviet Far East has in abundance. In each of these periods Siberia, as the Far Eastern territories are popularly known abroad, has played a role in world affairs.

When the Russian Cossack Semeon Dezhnev reached

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the Anadyr in 1648, all Northern Asia came under Czarist domination, but Russia had no ice-free outlets to the sea. Her entire northern coast opened on the Arctic Ocean. About the same time, the Cossack Khabarov penetrated the Amur valley, reaching its mouth in 1651; but the Manchus then were the ruling dynasty in China and ultimately proved more than a match for the small bands of Cossacks. Although withdrawing from the Amur valley, the Russians established diplomatic relations with China, the first western nation to do so, by the Nerchinsk treaty of 1689. For about a century after the occupation of Siberia, the Czars were content to exploit the fur wealth found in their Asiatic possession. Then began an era of expansion overseas, across the North Pacific to Northwest America.

In 1741, Captain Vitus Bering, skipper of one of Peter the Great's naval vessels, sailed through uncharted seas eastward of Kamchatka to the American mainland near what is now Sitka, Alaska, there to establish a foothold for Russia. This particular voyage culminated a series of explorations directed by Bering to chart the entire northern coastline of Asia. One of his objects was to determine whether an isthmus joined the mainlands of America and Northern Asia. He was also seeking a passage from the White Sea to the Pacific.

Bering's voyage proved only that there was land on both sides of the sea that bears his name. It was not until the explorations of Baron Von Wrangel in 1825 that the isthmus theory was finally disproved and the fact finally established that America and Asia were separate continents. The idea of a northern seaway continued to be wholly speculative.

The foothold of Russia in Northwest America brought

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results in the founding of the Russian-American Fur Company, which, in 1799, was granted a monopoly of the fur trade in America. By 1839 this company had 36 hunting settlements in the Kurile Islands, the Aleutian chain, Alaska, Bristol Bay, Cook's Inlet and Norton Sound. East of Alaska and the American Pacific Coast, the British-owned Hudson's Bay Company held almost equal sway.

The Russian domain in the Pacific reached its greatest extent about 1820, when Baranoff was Governor of Alaska. It had naval outposts at Petropavlovsk, Siberia, at Sitka, Alaska, and at Fort Ross in California. The Hawaiian Islands were occasionally used by Russian vessels. A Russian farm was maintained at Bodega Bay, California; at one time it had 1500 sheep, 3000 head of cattle and many horses. It was designed to supply the Alaskan colony with food, but as the fur trade grew, the farm became inadequate. It was also expensive to operate. For this reason Governor Ethloine of Alaska offered to sell it to the Hudson's Bay Company for $30,000, but his offer was declined. Eventually it was sold to a Swiss-American settler.

The problem of supplies for outposts led both the Hudson's Bay Company and the Russian-American Fur Company to resort to shipments by sea around the world. Russian seamen from the Baltic made a round-the-world voyage, their first in 1803-1805, to establish such a supply route. In time, however, the Russian governor reached an agreement with the Hudson's Bay Company by which its farms on Puget Sound and along the Willamette and Columbia rivers would supply provisions to the Russian-American settlements.

By the early nineteenth century Russia was the dominant western power in the North Pacific, her position contested chiefly by Great Britain. Apprehensive of British

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incursions, the Czars issued an ukase in 1821, under which she claimed part of the disputed Oregon territories and referred to the Bering Sea as a "closed sea." But the young republic of the United States also had its ideas about freedom of the seas and Russian claims in the American Northwest. Monroe's message to Congress of December 2, 1823, since known as the Monroe Doctrine, clearly stated that "the American continents, by the free and independent condition which they have assumed and maintained," are not henceforth to be considered "as subjects for future colonization by any European power."

Two years later Russia's disagreements with Britain (year by year English forts had crept up the west coast toward Russian Alaska) found their solution in the Anglo-Russian treaty of 1825, which granted the Hudson's Bay Company free navigation of streams across Russian territory in America to the interior of Northern British Columbia.

But Russian affairs in Alaska gradually declined. The Russian governors were naval officers with little knowledge of the fur trade. In Siberia, however, an enterprising governor, General Muravyev, began to explore the Amur river valley in 1847, seeking a warmer Pacific harbor nearer home than Petropavlovsk or Sitka. The Nikolaievsk settlement, later to become a Russian naval base, was founded near the mouth of the Amur. But here the Russians were blocked, for the territory on the left, or north bank of the Amur River belonged to China in accordance with the Russo-Chinese treaty of Nerchinsk signed in 1689.

Then, in 1854, the Crimean War broke out between Turkey and Russia. Its Far Eastern repercussions occurred when the combined fleets of Britain and France attacked

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the Russian naval base at Petropavlovsk and very nearly took it. A decade before Great Britain had become seriously embroiled in the Opium Wars (1839-1842) in China, as well as in the subsequent Taiping Rebellion, using both to expand the sphere of British influence in China. British gunboats appeared to patrol Chinese rivers, and British seapower consolidated itself in the Crown Colony at Hong Kong. Imperial Russia also took advantage of those wars. The Siberian governor-general, stressing the danger to the Lower Amur from British naval attacks, induced the Chinese to sign the Treaty of Aigun in May 1858, by which Russia secured control of the left bank of the Amur as far as the Ussuri, from which the two powers would exercise joint control down to the sea on both sides. This proved so impracticable, however, that on July 20, 1860, a Russian party occupied a site on Peter the Great Bay near the Korean frontier, where they founded a city called Vladivostok ("Possess the East"). These possessions were confirmed by the Treaty of Peking, Nov. 2, 1860. Thus Russia obtained, if not an altogether ice-free harbor, at least an excellent port in the Bay of the Golden Horn at Vladivostok.

During this period, Russian fears had been growing that the expansion of the British empire in northwest Canada might, were Britain to seize Alaska, leave only the Bering Strait to divide the rival empires in the North Pacific. The academic question of whether Asia and America were separated or united by an isthmus had long since been solved. The question now was to prevent a head-on collision of expanding empires in the North Pacific.

In the Crimean War the United States had been a neu-

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tral nation, friendly to Russia. One of the natural consequences was an arrangement between Russia and the United States whereby, on March 24, 1856, Percy McDonough Collins became the Commercial Agent of the United States for the Amur River. Collins was a man of great vision and wrote in his memoirs:

"My attention was first turned towards Siberia by the perusal of Lieutenant Von Wrangel's narrative of an expedition to the Polar Sea. Reflecting on the vast extent of the country, its mighty rivers, its stately and boundless forests, its immense mineral wealth, I was struck with the magnitude of its natural resources, and with its possible value to the commerce of the world, if it could only obtain an easy outlet to the ocean. For several years previous to 1855, while residing in California, I had given much study to the commercial resources of the Pacific side of the United States, especially in connection with the opposite coast of Asia.

"I had already fixed in my own mind upon the river Amoor as the destined channel by which American commercial enterprise was to penetrate the obscure depths of Northern Asia, and open a new world to trade and civilization, when news arrived in 1855 that the Russians had taken possession of the Amoor country, and formed a settlement at the mouth of the river. Greatly interested in this event, the important consequences of which my previous speculations enabled me fully to comprehend, I proceeded to Washington in search of accurate information on the subject. . . .

"At Washington, I had conferences with President Pierce, Secretary Marcy, and the Russian Ambassador, which resulted in my appointment, March 4, 1856, as

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Commercial Agent of the United States for the Amoor River."*

To reach his destination Collins crossed the Atlantic to Russia and made an overland trip across Siberia to the headwaters of the Amur, near Nerchinsk, whence he sailed downriver to Nikolaievsk, the first westerner other than a Russian to do so. Of the Manchu junks along the Amur, he wrote: "There were ten men to each junk—eight at poles or cordels, one steering and one in the bow (the pilot), sounding and crying the depth of water to the steersman. They all saluted us, crying 'Mendow! Mendow!' It seemed like slow work—as they laboriously poled along the sand bar or cordelled along the shore—and reminded me of the early barge and keelboat navigation on the Mississippi and Ohio rivers, and the old flatboat song,

> 'All the way from Shawnee-town,
> Long time ago,'

when it occupied six months to make a voyage from New Orleans to Cincinnati . . . I wished for a good steamboat that I might have taken all these Manchoo junks in tow and landed them at Igoon, in order to have shown the Manchoos the great advantage of steam on their magnificent rivers."

Collins then expanded his vision: "Steamboats will take the place of the canoe and barge, and the swarthy Tartar will view with wonder and admiration the progress of Russian power here, as his ancestors did upon the Caspian three hundred years ago. But it will be more rapid here now than there in the sixteenth century, because steam, artillery, and revolvers give to civilized man an irresistible

* Percy McDonough Collins, *A Voyage Down the Amoor* (New York: Appleton, 1860).

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power. Commerce, navigation, the arts and sciences will develop this stupendous country and add, as it were, a sixth continent to the domain of civilization. The whole country finds its counterpart in different sections of California."

There were silver mines at Nerchinsk and gold mines at Onon, and at Petrovsky Zavod, near Lake Baikal, there was a "large iron foundry, smelting furnaces, trip hammers, rolling mill, and brass, copper and iron fittings being turned, polished, cast, and fitted at the foot of the mountains, from whose summits the Amoor could be descried, and could be reached by a wagon within a few days . . . These works were established in the reign of Peter the Great, and belong to the crown, and are worked mostly by convicts." Petrovsky Zavod even then could produce "machinery for a steamer on the Amoor."

At Nikolaievsk Collins saw six American firms establishing stores. Pierce & Co. had brought with them, California style, a frame house with a shingle roof, the first in the country. The Russians had log houses and thought it impossible that a frame house, with its thin sides, could resist the cold. Other American firms were settling in log houses, some installed with San Francisco furniture. At Petropavlovsk-in-Kamchatka were Messrs. Hunt and Burling, recently of San Francisco, who had established a trading post.

From 1847 to 1871, American whalers secured whale oil and bones valued at $87,500,000 from the North Pacific, and in the Russian Pacific harbors Collins noted steamers and sailing vessels from Honolulu, San Francisco, and Boston. Of seven merchantmen that entered the Amur in 1857 three were from San Francisco, two from Hong Kong, and two from Boston. Steamboats were being put into operation along the Amur itself. Of eleven steamers—

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from 15 h.p. to 70 h.p. each—that called there in 1860, four had been built in America, five in Hamburg, two at Petrovsk and one at Nikolaievsk. The prospects for industrial and commercial developments along the Amur were certainly very promising.

Collins proposed to the Czarist Government the building of an "Amoor Railway from Chetah to Irkutsk," connecting steamers on the Amur with steamers on the Angara. Thus, he argued, Siberia would have combined steamer-rail transport from the Pacific far to the interior. Mines and mills could be opened up. But alas, nothing came of his proposal, several factors contributing to its failure. First of these was the fact that it had been demonstrated in England that to convey a ton of merchandise from London to Nikolaievsk by sea would cost about five shillings a hundredweight, whereas to carry one hundredweight of goods from Europe to Irkutsk overland across Siberia would cost 26 shillings. Mr. Collins's scheme for a railway would be more costly than the cheap land-transport system then in force. That is, it was cheaper to transport goods up the Amur from China by sea than overland across the Mongolian steppes to Kiakhta. A courier travelling by road could proceed from Chita to Irkutsk, the route of Collins's proposed railway, a distance of 520 miles, in sixty-five hours, including delays on the road. Such were the arguments used to reject Collins's scheme.

Another vision of Collins was an Alaska-Siberia telegraph line, and he actually obtained permission from the Czar to build such a line to the Amur to meet the American line running north across the Bering Strait. In March, 1864, the Western Union Telegraph Co. raised $3,000,000 for a 4000-mile line from Vancouver to the Amur, and a great expedition was organized in San Francisco in 1865

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under the command of Col. Charles S. Buckley. There were three divisions: the British Columbian, the Russian-American, and the Siberian. A member of the Siberian division, George Kennan, a boy telegraphist in Civil War days, got his start to fame as a writer there. For two years in Siberia and Kamchatka, his party explored a 1600 mile route from Anadyr Bay to the mouth of the Amur. Begun after the failure of Cyrus Field's first Atlantic cable, Collins's scheme was abandoned in 1867, when the second Atlantic cable proved a success. Of Collins's later activities little is known except that his name is also associated with the more successful Pacific Mail, forerunner of the great steamship lines plying between San Francisco and the Far East.

During this period of activity in Siberia, Alaska became more and more difficult and costly to maintain, so much so that in 1867 the Russians decided to sell their holdings on the North American continent. Eventually, through the efforts of Secretary of State Seward a sale was negotiated to the United States for $7,200,000. In the United States, the purchase was called "Seward's Folly," and Alaska became a political football for many years. Seward himself did not expect repayment from Alaska. But during the first half century following 1867, Alaska's gold production amounted to about $300,000,000, and Seward's venture was repaid in gold alone forty-four times over.

Such developments could not be foreseen in 1867, when the Russian Czar derisively called Alaska an "icebox" and preferred to move his forces into the sunny plains of Central Asia. Tashkent fell to Czarist arms in 1864, and became the capital of Russian Turkestan. In 1867, Alma-Ata was occupied and converted into an outpost of Czarism in Kazakhstan on the frontier of western China. By

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1888 the Trans-Caspian Railway was extended from Krasnovodsk to Samarkand, and by 1905 the Orenburg-Tashkent Railway linked the Central Asian provinces with European Russia. If, by the sale of Alaska, the Russian Czars relinquished an overseas domain on the North American continent, they gained, at the same time, more extensive possessions in the heart of the Asiatic continent. The lines of Russian communication remained overland and internal, confined to the Asiatic mainland.

Siberia, like the United States and Canada, had its pioneers and its romance. But progress all but ceased during the nineteenth century, when Siberia became notorious as a "land of exile." Czarism held the country as a colonial hinterland under virtual military occupation and, when in need of workmen for the silver and gold mines that were discovered, sent all kinds of outcasts, including political offenders, into Siberian exile as convict labor. To these exiles Pushkin sang, "Deep in the Siberian mine, keep your patience proud." To them Dostoyevsky dedicated his soul-searching *Crime and Punishment.*

Gloom and oppression overshadowed the rich country, with its vast herds of reindeer in the north, its abundant livestock on the western grasslands, and its gold fields in the vicinity of such prosperous towns as Ekaterinburg, Krasnoyarsk, and Yeniseisk. In 1881, when the American naval engineer George Melville, one of the few survivors of the ill-fated De Long North Pole Expedition, arrived in Verkhoyansk, then an exile colony, the nearest telegraph station was at Irkutsk. There was no railway, and the iron works at Botom and Petrovsky Zavod had long since been idle. The only person who could understand him was a political exile. With this educated man, Mel-

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ville conversed in English, explained the disaster that had brought him to Verkhoyansk and escaped being put in chains by a stupid police officer who wanted to arrest him as a smuggler. Interested in the exile colony, Melville then asked through his interpreter if there was any objection to his visiting the exiles. The officer sized him up and replied: "Oh, no. No objection whatever. I don't think the Nihilists* can harm the Republicans; both are very much alike." Even members of Lincoln's party, the Republicans, were classed as revolutionaries in the official mind of autocratic Russia.

The Russian Empire's first really great step forward in the Far East was the building of the Trans-Siberian Railway between 1891 and 1900. This project stimulated iron and steel production to such an extent that, among other new enterprises, a steel rail mill was founded at Nadezhdinsk, north of Sverdlovsk. But the step was so long overdue that when it became apparent that the Russian Empire was expanding—by this new railway in conjunction with the Chinese Eastern Railway that it had just built (1896-1903)—to the Yellow Sea, other nations with commercial interests in Asia were not favorably impressed. The Chinese Eastern Railway, which crossed Manchuria to Vladivostok, had a spur line reaching down from Harbin to Port Arthur, a warm-water port seized by soldiers of the Russian army corps sent into Manchuria during the Boxer Rebellion in China in 1900. At this time American gunboats appeared for patrol duty on the Yangtse River. They were not withdrawn until December, 1941, a few days before the Japanese attack on Pearl Harbor.

Russian activity on Chinese territory was alarming to Japan as well as to England. In 1902, therefore, Great

* Members of the Nihilist terrorist revolutionary party in Czarist Russia.

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Britain and Japan concluded a defensive alliance. The Russo-Japanese war broke out in 1904, and Russia was crushingly defeated. The Russian Empire was as much an aggressor as Japan in that war, for each was fighting for the privilege of partitioning China in order to gain control of trade through railway concessions. To prevent Russia from becoming too powerful, the United States and England, also interested in Chinese railway concessions, backed Japan.

That the United States had commercial interests at stake was evident from the activity of the American diplomat Lloyd C. Griscom, whose memoirs have recently been published.* Griscom is said to have been "born with a steamship line in his mouth." Reviewing his book, R. L. Duffus writes: "In Japan he skilfully exploited the Japanese need for American sympathy in the war with Russia to settle some points of controversy there. He came near putting through E. H. Harriman's grandiose scheme for linking the United States to Japan by a steamship line, buying the Chinese Eastern from Russia, getting trackage on the Trans-Siberian and so reaching the Baltic."†

After its defeat at Port Arthur, the Czarist Empire remained a strong land power, but it was without easy access to the sea, an important strategic disadvantage in an era of sea power. The British Empire, growing ever stronger along well-established sea lanes, had come to dominate the seven seas and the commerce of the world. The Czarist Empire itself had become almost a semicolony of Great Britain, France, Germany, and Belgium.

In the Far East, the Czars converted Vladivostok into a

* Lloyd C. Griscom, *Diplomatically Speaking* (Boston: Little, Brown & Co., 1940).

† *The New York Times Book Review*, October 13, 1940.

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Gibraltar on the Pacific, a fortress with 72 gun emplacements mounting 580 guns of varied calibers, manned by a garrison of 80,000 soldiers. Under the terms of the peace they continued to hold the Chinese Eastern Railway with Russian bayonets, and along this line passed a stream of freight to the fortified rocks at Vladivostok, through whose harbor during the subsequent decade about 90 per cent of the products of Manchuria and north China were cleared. In this period, until the Russian revolution of 1917, the Czar and the Mikado jointly shared in the despoliation of Manchuria.

The course of the Bolshevik revolution took a slightly different path in the Far East than it did in European Russia, chiefly due to the pressure that the military interventionist forces of foreign powers were able to exercise in the Far East. One of the principal leaders of that revolution was an American immigrant of Russian birth, Alexander Krasnoshchekov,* whose real name was Tobelson.

Krasnoshchekov came from a humble Jewish family in the province of Kiev. As a boy of 18 he was already active in the revolutionary movement and was arrested and sent to prison for six months, after which he was exiled to the Pacific coast of Siberia. There he became acquainted with men of like mind and came to know the political situation in the Far East very well. His brother had been hanged in 1905, and he was wholly devoted to the overthrow of Czarism. After his first period of exile, he returned to his home province, only to be rearrested and imprisoned once more. Eventually he fled from his native land, finding refuge as an emigrant to America, where he worked as a

* See George Stewart, *The White Armies of Russia* (New York: The Macmillan Company, 1933).

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tailor and paperhanger, later entering the University of Chicago, where he received his B.A. in 1912.

In February 1917, on receiving news of the revolution, Krasnoshchekov left for Russia, landing in Vladivostok in August. Two months later he became vice-president of the First Workers' Conference held in the Far East. After the November (1917) revolution, Krasnoshchekov worked for the establishment of Soviet power in Siberia and was elected president of the Far Eastern Council of People's Commissars, which began to administer the affairs of the Far East in December 1917.

It was then that the Allies, alarmed by the spread of Bolshevism in Russian Eastern Asia, decided to intervene, using as a convenient pretext the need for transferring an army formed of Czecho-Slovak prisoners via Siberia to the Western front in France.

The full American war effort was directed toward France in 1917. The Far East appeared remote and unrelated to the war against Germany. Japan was an ally of the western powers. When, however, the Russian front in Eastern Europe collapsed in 1917, the Allies sought to reestablish it. The result was intervention, insisted on by the Entente powers as much to overthrow the Soviet Regime as to salvage the investments of these powers in Russian industries.

In 1918-1919 the young Soviet Republic thus was confined to Moscow and Leningrad provinces. Most of Siberia, the Ukraine, the Crimea and the Caucasus was held by former Czarist generals, commanding the White Armies. The Czecho-Slovak prisoners were granted the right to leave Russia via the Trans-Siberian railway, ostensibly for embarkation at Vladivostok on troop transports to take them to the European front; actually, however, they seized

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control of the railway between the Urals and Lake Baikal, while Admiral Kolchak, one of the chief anti-Soviet leaders, set up a government with Entente assistance in western Siberia. Japanese, Canadian, and American troops held eastern Siberia in some degree of collaboration with Admiral Kolchak, who, like the Japanese puppet generals, the Cossack Ataman Semeonoff, and his adjutant Kalmykoff, did not meet with the approval of General W. S. Graves, commander of the American Expeditionary Force to Siberia.

The first A.E.F. contingent to Siberia sailed from San Francisco on August 13, 1918, on the transport *Thomas*. This party consisted of 40 officers and 1889 enlisted men. By September, 1918, the A.E.F. in Siberia totaled more than 7,000 officers and men, assigned to guard the Trans-Siberian railway in three sections: 1. between Verkhne-Udinsk (now Ulan-Ude) and Lake Baikal; 2. between Vladivostok and Suchan; 3. a small section, Iman to Spassk, which is halfway between Khabarovsk and Vladivostok. After the Armistice in November, 1918, General Graves's forces were withdrawn from the Lake Baikal section and concentrated in the vicinity of Vladivostok. Apart from American troops, engaged in control of the railway, there were 800 Canadians, 829 British, 1400 Italian, 10,076 French and 60,000 Japanese in the Allied military forces.*

American activities were confined to the responsibility of guarding the railway line. Of the operations in general it was said at the time by Paul S. Reinsch, U. S. Minister to China:

"Through the Allied operations in Siberia and Manchuria, the question of control of the Chinese Eastern Railway was of paramount importance. . . . The right of

* Stewart, *op. cit.*, pp. 136, 153.

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constructing this line through Manchuria had been conceded by the Chinese Government in 1896 to a railway company formed for the purpose, an organization nominally private but actually under the control of the Russian Ministry of Finance, and by Russian law assimilated to the status of a Government institution.

"The proposal made by the American Government in the middle of September to place the whole Siberian railway system, including the Chinese Eastern Railway, under the control of Mr. Stevens and the Russian Railway Service Corps as agents and trustees of the Russian Government was received with obvious gratification by the authorities of the Chinese Foreign Office."*

Control of the railway was essential to military conquest of the area, but in carrying out this control, there were international rivalries among the Allies: the chief of which was that between Japan and the United States. This came to the foreground in disputes between the commanders. American and Japanese interests were not identical.

In 1917 the Japanese thought that the Russian Revolution provided the opportunity for seizing the Far Eastern Territory or for establishment of a puppet state. When intervention into Asiatic Russia's affairs was agreed upon by Britain, France and Japan, with the tacit support of the United States, the Japanese sent more than 70,000 troops into the Russian Far East and occupied the Trans-Siberian railway as far west as Chita, an occupation shared with American troops. Japan's action was prompted by both fear and self-interest.

"She was haunted," writes the historian George Stewart, "by the grim specter of Communism . . . Japan also had

* *U. S. Foreign Relations, Publication* 81 (1918), p. 126, Report to the Secretary of State, from Peking, Nov. 29, 1918.

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in view certain objectives which many of her leaders felt necessary for her security as a great Pacific power, the securing of that portion of the Island of Sakhalin which the treaty of Portsmouth denied her, the extension of her territory above Korea and greater railway facilities in Manchuria."*

In order to provide her intervention with a "Russian" face, Japan financed and supported a large number of White Guard leaders, almost every one of whom was a demoralized cutthroat willing to sell himself and his country to the highest bidder. Of one such individual, Lieutenant Kalmykoff, second in command to Ataman Semeonoff, General Graves said: "He was the worst scoundrel I ever saw or heard of, and I seriously doubt, if one should go entirely through the Standard Dictionary, looking for words descriptive of crime, if a crime could be found that Kalmykoff had not committed. He was armed and financed by Japan, in their efforts 'to help the Russian people.' I say this advisedly, because I have evidence that would satisfy any open-minded person. Kalmykoff murdered with his own hands, where Semeonoff ordered others to kill, and therein lies the difference between Kalmykoff and Semeonoff. To use a Russian expression, Kalmykoff was 'liquidated' by the Chinese when he was driven out of Siberia and tried to take refuge in China. Semeonoff was later driven out of Siberia and took refuge in Japan where he still lives [1931]."†

In this vivid fashion General Graves condemned the Japanese puppets and revealed the nascent clash of American-Japanese interests: "I cannot see why the United

* Stewart, *op. cit.*, p. 134.

† Gen. W. S. Graves, *America's Siberian Adventure, 1918-1920.* New York: Jonathan Cape & Harrison Smith, 1931.

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States cannot send troops into China or Siberia without getting the consent of Japan," he said, "for I do not consider they have any more interest in Manchuria and Siberia than the United States."*

The heart of General Graves was so lacking in accord with military intervention in the new Union of Soviet Socialist Republics that he was bitterly accused by the other allied commanders as being non-cooperative. That he knew the purpose underlying intervention is stated in his memoirs, written to answer his critics. "I doubt if any unbiased person," he said, "would ever hold that the United States did not interfere in the internal affairs of Russia. By this interference, the United States helped to bolster up, by its military forces, a monarchistically inclined and unpopular government, of which the great mass of people did not approve. . . . The United States was a party to the efforts to overthrow the Soviets, as Kolchak was unquestionably fighting them."† But General Graves was stubborn in refusing to go along with the other interventionists as far as they desired him to go. He confined the activities of the force under his command to the duties imposed upon him by instructions he had received from President Wilson in the form of an *aide-mémoire*. Of this *aide-mémoire*, Newton D. Baker (then Secretary of War) writes in a foreword to General Graves's memoirs:

"President Wilson personally wrote the so-called *aide-mémoire* which General Graves sets out on page five of his story, a copy of which I personally delivered to the General in the railway station in Kansas City . . . From that hour until the Siberian expedition returned to the United States, General Graves carried out the policy of his gov-

* *Op. cit.*, pp. 168-169.
† *Op. cit.*, pp. 347, 355.

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ernment without deviation, under circumstances always perplexing, and often irritating. Frequently in Washington I heard from Allied military attachés, and sometimes from the State Department criticism to the effect that General Graves would not cooperate, but when I asked for a bill of particulars, I invariably found that the General's alleged failure was a refusal on his part to depart from the letter and spirit of his instructions.

"In June, 1919, I saw President Wilson in Paris, and he discussed with me representations made to him from French and British sources to the effect that General Graves was an obstinate, difficult and uncooperative commander. When I recalled to the President the policy laid down in the *aide-mémoire* and gave him the details of similar complaints made to me in Washington, I was able to reassure him of the complete fidelity of General Graves to his policy, in the face of every invitation and inducement on the part of the Allied Commanders to convert the Siberian expedition into a military intervention in Russia's affairs against which the President had set his face from the first. At the conclusion of our interview, the President smiled and said, 'I suppose it is the old story, Baker; men often get the reputation of being stubborn because they are everlastingly right.'

"At all events, the President then and later gave his full approval to the conduct of General Graves, and if the Siberian Expedition was in fact unjustified and if it really failed to accomplish substantially helpful results, this much is true of it—it was justified by conditions as they appeared to be at the time, it refrained from militaristic adventures of its own, it restrained such adventures on the part of others, and it created a situation which made necessary the withdrawal of all Allied forces from Siberian soil

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when it was withdrawn, thus making impossible territorial conquests and acquisitions on Russian soil by other nations whose interests in the Far East might easily have induced them to take over for pacification, and ultimately for permanent colonial administration, vast areas of Russia's Far East."*

Now, what were the instructions in the *aide-mémoire* that was given to General Graves, a copy of which was sent simultaneously to all Allied Governments?

Aide-Mémoire

"The whole heart of the people of the United States is in the winning of this war. The controlling purpose of the Government of the United States is to do everything that is necessary and effective to win it. It wishes to cooperate in every practicable way with the Allied Governments, and to cooperate ungrudgingly; for it has no ends of its own to serve and believes that the war can be won only by common council and intimate concert of action. It has sought to study every proposed policy or action in which its cooperation has been asked in this spirit, and states the following conclusions in the confidence, that if it finds itself obliged to decline participation in any undertaking or course of action, it will be understood that it does so only because it deems itself precluded from participating by imperative considerations either of policy or fact.

"In full agreement with the Allied Governments and upon the unanimous advice of the Supreme War Council, the Government of the United States adopted, upon its entrance into the war, a plan for taking part in the fighting on the western front into which all its resources of men and material were to be put, and put as rapidly as possible, and it has carried out that plan with energy and success, pressing its execution more and more rapidly forward and literally putting into it the

* Graves, *op. cit.*, p. x-xi.

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entire energy and executive force of the nation. This was its response, its very willing and hearty response, to what was the unhesitating judgment alike of its own military advisers and of the advisers of the Allied Governments. It is now considering, at the suggestion of the Supreme War Council, the possibility of making very considerable additions even to this immense program which, if they should prove feasible at all, will tax the industrial processes of the United States and the shipping facilities of the whole group of associated nations to the utmost. It has thus concentrated all its plans and all its resources upon this single absolutely necessary object.

"In such circumstances it feels it to be its duty to say that it cannot, so long as the military situation on the western front remains critical, consent to break or slacken the force of its present effort by diverting any part of its military force to other points or objectives. The United States is at a great distance from the field of action on the western front; it is at a much greater distance from any other field of action. The instrumentalities by which it is to handle its armies and its stores have at great cost and with great difficulty been created in France. They do not exist elsewhere. It is practicable for her to do a great deal in France; it is not practicable for her to do anything of importance or on a large scale upon any other field. The American Government, therefore, very respectfully requests its Associates to accept its deliberate judgment that it should not dissipate its forces by attempting important operations elsewhere.

"It regards the Italian front as closely coordinated with the western front, however, and is willing to divert a portion of its military forces from France to Italy if it is the judgment and wish of the Supreme Command that it should do so. It wishes to defer to the decisions of the Commander-in-Chief in this matter, as it would wish to defer in all others, particularly because it considers these two fronts so related as to be practically but separate parts of a single line and because it would be necessary that any American troops sent to Italy

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should be subtracted from the number used in France and be actually transported across French territory from the ports now used by the armies of the United States.

"It is the clear and fixed judgment of the Government of the United States, arrived at after repeated and very searching considerations of the whole situation in Russia, that military intervention there would add to the present sad confusion in Russia rather than cure it, injure her rather than help her, and that it would be of no advantage in the prosecution of our main design, to win the war against Germany. It can not therefore, take part in such intervention or sanction it in principle. Military intervention would, in its judgment, even supposing it to be efficacious in its immediate avowed object of delivering an attack upon Germany from the east, be merely a method of making use of Russia, not a method of serving her. Her people could not profit by it, if they profited by it at all, in time to save them from their present distresses, and their substance would be used to maintain foreign armies, not to reconstitute their own. Military action is admissible in Russia, as the Government of the United States sees the circumstances, only to help the Czecho-Slovaks consolidate their forces and get into successful cooperation with their Slavic kinsmen and to steady any efforts at self-government or self-defense in which the Russians themselves may be willing to accept assistance.

"Whether from Vladivostok or from Murmansk and Archangel, the only legitimate object for which American and Allied troops can be employed, it submits, is to guard military stores which may subsequently be needed by Russian forces and to render such aid as may be acceptable to the Russians in the organization of their own self-defense. For helping the Czecho-Slovaks there is immediate necessity and sufficient justification. Recent developments have made it evident that that is in the interests of what the Russian people themselves desire, and the Government of the United States is glad to contribute the small force at its disposal for that purpose. It yields,

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also, to the judgment of the Supreme Command in the matter of establishing a small force at Murmansk, to guard the military stores at Kola, and to make it safe for Russian forces to come together in organized bodies in the north. But it owes it to frank counsel to say that it can go no further than these modest and experimental plans. It is not in a position, and has no expectation of being in a position, to take part in organized intervention in adequate force from either Vladivostok or Murmansk and Archangel. It feels that it ought to add, also, that it will feel at liberty to use the few troops it can spare only for the purposes here stated and shall feel obliged to withdraw these forces, in order to add them to the forces at the western front, if the plans in whose execution it is now intended that they should cooperate should develop into others inconsistent with the policy to which the Government of the United States feels constrained to restrict itself.

"At the same time the Government of the United States wishes to say with the utmost cordiality and good will that none of the conclusions here stated is meant to wear the least color of criticism of what the other Governments associated against Germany may think it wise to undertake. It wishes in no way to embarrass their choices of policy. All that is intended here is a perfectly frank and definite statement of the policy which the United States feels obliged to adopt for herself and in the use of her own military forces. The Government of the United States does not wish it to be understood that in so restricting its own activities it is seeking, even by implication, to set limits to the action or to define the policies of its Associates.

"It hopes to carry out the plans for safeguarding the rear of the Czecho-Slovaks operating from Vladivostok in a way that will place it and keep it in close cooperation with a small military force like its own from Japan, and if necessary from the other Allies, and that will assure it of the cordial accord of all the Allied powers; and it proposes to ask all associated in this course of action to unite in assuring the people of Russia

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in the most public and solemn manner that none of the Governments uniting in action either in Siberia or in northern Russia contemplates any interference of any kind with the political sovereignty of Russia, any intervention in her internal affairs, or any impairment of her territorial integrity either now or hereafter, but that each of the associated powers has the single object of affording such aid as shall be acceptable, and only such aid as shall be acceptable, to the Russian people in their endeavor to regain control of their own affairs, their own territory, and their own destiny.

"It is the hope and purpose of the Government of the United States to take advantage of the earliest opportunity to send to Siberia, a commission of merchants, agricultural experts, labor advisers, Red Cross representatives, and agents of the Young Men's Christian Association accustomed to organizing the best methods of spreading useful information and rendering educational help of a modest sort, in order in some systematic manner to relieve the immediate economic necessities of the people there in every way for which opportunity may open. The execution of this plan will follow and will not be permitted to embarrass the military assistance rendered in the rear of the westward-moving forces of the Czecho-Slovaks.
Department of State,
Washington, July 17, 1918."*

These are the general instructions General Graves received from Newton D. Baker, which he carried out during the year and a half that American forces were in Siberia. In the spring of 1920 the United States of America withdrew its troops from Siberia. Said Secretary of State Hughes at the Washington Conference on the Limitation of Armament, in November, 1921, referring to the expedition and to the situation as a whole: "The American Government then ceased to be a party to the expedition, but

* *U. S. Foreign Relations,* 1918, Russia, Vol. II, pp. 287-289.

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it remained a close observer of events in Eastern Siberia and has had an extended diplomatic correspondence upon this subject with the Government of Japan. It must be frankly avowed that this correspondence has not always disclosed an identity of view between the two Governments . . . The United States has been strongly disposed to the belief that the public assurances given by the two Governments at the inception of the joint expedition . . . required the complete withdrawal of Japanese troops from all Russian territory . . . The general position of the American Government was set forth in a communication to Japan of May 31, 1921. In that communication appears the following statement:

" 'The Government of the United States must in all candor explain its position and say to the Japanese Government that the Government of the United States can neither now nor hereafter recognize as valid any claims or titles arising out of the present occupation or control, and that it cannot acquiesce in any action taken by the Government of Japan which might impair existing treaty rights, or the political or territorial integrity of Russia.' "*

Lenin was head of the Soviet State in 1921 when the Conference on Limitation of Armament met in Washington, D. C. The Soviet State was not recognized then, and so there was no exchange of views between the United States and Soviet Russia. In 1933, however, when the United States accorded the U.S.S.R. full diplomatic recognition, the Soviet Foreign Minister Maxim Litvinov released an official statement to the press, soon after his return to Moscow from Washington, D. C. Said Litvinov:

* *Conference on Limitation of Armament,* Washington, Nov. 12, 1921 to Feb. 6, 1922.

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"Not awaiting final settlement of mutual claims, we have decided to renounce one of our claims on the United States, relative to the American expedition to Siberia, and we do this on consideration of certain actions of the United States at that time about which I learned while visiting the State Department."*

These "actions" were undoubtedly the steps taken by General Graves in accord with the spirit of his instructions to block the Japanese in their attempt to occupy Eastern Siberia permanently, turning it into a Japanese colony.

In January, 1920, shortly before withdrawing American troops from Siberia, the United States State Department informed Japan that "further military effort to assist the Russians in the struggle towards self-government may, in the present situation lead to complications which would have exactly the opposite effect."† But despite the official American view that to act on "the offensive in cooperation with the anti-Bolshevik forces is impracticable," Japanese troops remained to interfere with the formation of a Soviet Government in Far Eastern Siberia.

When the first interventionist forces landed (in 1918), the Bolshevik administration was compelled to flee, and Krasnoshchekov, the former Chicagoan, himself barely escaped with his life. He did not return to the Far East until 1920. When he did come back, he was convinced that to establish a Soviet Government in the face of Allied opposition was impossible, and he persuaded the Soviet Siberian military command that a buffer state ought to be created instead. On March 9, 1920, such a state was formed at Verkhne-Udinsk under the aegis of the Temporary

* *Izvestia*, Nov. 20, 1933.
† *U. S. Foreign Relations*, 1920, Vol. III, p. 488.

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Local Self-Government of the Baikal Region. To the new government Krasnoshchekov was accredited as Ambassador of Soviet Russia. On April 6, with his active participation, the Far Eastern Republic was formed.

The Japanese military leaders in Siberia immediately decided to attempt to utilize the Government of the Far Eastern Republic as a tool against the Soviets. On May 11 General Oi guardedly endorsed the new regime provided it did not turn Soviet.

Said General Oi to the Vladivostok People's Assembly: "I wish to point out to you that I have repeatedly announced that . . . a Communist administration will not be allowed in those regions in which Japanese troops are stationed."* But the Republic was endorsed by the Vladivostok authorities. Likewise, the independently formed government of Khabarovsk gave its endorsement and adherence to the Far Eastern Republic.

From its inception, the Bolshevik members and other partisans of Russian independence in the Far Eastern Republic used their influence against the Japanese and the White Guards. They also utilized the differences existing between the United States and Japanese forces to free their country from all interventionists. The Bolsheviks defeated Admiral Kolchak and other White Guardists. Ultimately, on October 19, 1922, the Japanese evacuated their last troops, although not withdrawing from the Russian or northern half of the island of Sakhalin until 1925. With the Japanese off the mainland, the Far Eastern Republic amalgamated with the Soviet Union on November 17, 1922.

But the years of peace granted the Soviet Far East were brief in the extreme. In 1929, there began a series of at-

* Stewart, *op. cit.*, p. 396.

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tempts undertaken by Manchurian, and later Manchukuoan-Japanese, troops to violate Soviet territory. In August, 1938, Japanese troops crossed the Soviet frontier south of Vladivostok in an attempt to seize strategic Changkufeng Hill. A similar incident developed a year later in the region of Lake Buir-Nor in the Mongolian People's Republic. Both times the Japanese were badly beaten, but not before the fighting had spread over a wide territory, involving tens of thousands of troops and hundreds of airplanes. Nevertheless, in April, 1941, after ten years of negotiations, the Soviets concluded a nonaggression pact with Japan, which remains in force at this writing.

The Soviets have always expressed a desire to maintain peace in the Far East. Unlike Japan and unlike Russian Asia under the Czars, Soviet Asia has no expansionist ambitions or designs on foreign territory. Its people support China materially in her war of liberation from Japanese occupation, which they have also experienced. They give active military assistance to Mongolia against the Japanese invaders. Even prior to the joint Anglo-Soviet occupation of Iran to forestall its becoming a springboard for Axis offensive operations, the Soviets assisted Iran, as they did Turkey, to found her own industries.

With respect to neighboring states, the Soviets have aimed not at aggression, but at preservation of peace and the strengthening of trade relations. During the past two decades their energies have been absorbed at home. Throughout their relations with Japan the Soviets have sought a peace that would allow them to build up their country. To avoid an outbreak of hostilities the Soviets sold Japan the Chinese Eastern Railway, a bone of contention in Far Eastern affairs since its completion by a state-controlled Russian firm in 1903. This meant the

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withdrawal of Soviet troops, whose presence in Manchuria as railway guards was objected to by Japan. The nonaggression pact between the Soviet Union and Japan, which could not be concluded when the world was at peace, paradoxically is in force today when the world is at war, strengthening the hand of the Soviets against the Nazi invaders in Europe as it seemingly does that of Japan for conquest in the Southwest Pacific. But this pact is clearly contradictory and unstable. Both nations are upholding it for purely strategic reasons, and neither country is resting its defenses upon the pact alone. In signing a nonaggression pact, the Soviets did not surrender the right to defend themselves; neither did they disarm their Far Eastern defenses.

In respect to the Soviet Far East, the Japanese program has been quite clear for many years. It was partially enunciated as long ago as September 4, 1922, at the conference in Changchun (now Hsinkiang) between Japan, the Far Eastern Republic, and Soviet Russia. At that time the Japanese demanded the internationalization of Vladivostok, the revision of the fisheries convention, the policy of the "open door" for Japanese merchants, the destruction of fortifications in the territory of the Russian Far East, and the neutrality of the Far Eastern Republic in the event of Japan going to war with a third power.*

It has been equally clear that the Soviet Union could accede to no such demands, and that it is not relaxing its vigilance in the Far East. How carefully on guard it is, is evident from the tone of an article that appeared in *Pravda* on January 27, 1942, in which it is noted: "Japanese initial successes have turned several weak heads in the editorial rooms of Japanese newspapers. In imitating

* Cited in Stewart, *op. cit.*

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their German colleagues they are beginning to divide and sell the skin of the bear that isn't dead . . . We consider it necessary to warn them against these useless and harmful occupations . . . Let the Japanese journalists study the experiences of others, and don't let them think that initial successes must necessarily have a happy ending. Otherwise they will learn from their own experience the truth of the saying that he who laughs last laughs loudest."

Naturally, the Soviet Union desires to remain quiescent in the Far East while heavily engaged in Europe. Maxim Litvinov explained the reason in a press interview given in Washington, D. C., on December 13, 1941, a few days after Pearl Harbor: "We feel that no one can smash Hitler without us, or instead of us, and we should be rendering our allies and the common cause poor service did we for a moment relax our efforts in this direction just now."

These efforts have been so heroic that President Roosevelt has twice paid tribute to them, in radio talks to the American people. In the first, on December 8, 1941, he said: "It will not only be a long war, it will be a hard war. The production [of United States industry] must be not only for our army and navy and air forces. It must reinforce the other armies and navies and air forces fighting the Nazis and the warlords of Japan throughout the Americas and the world. . . . We must learn to know that the guerrilla warfare against the Germans in Serbia or Norway helps us; that a successful Russian struggle against the Germans helps us; and that the British successes on land or sea in any part of the world strengthen our hands."

Five months later, April 28, 1942, he added: "On the European front the most important development of the past year has been, without question, the crushing counter-offensive on the part of the great armies of Russia against

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the powerful German Army. These Russian forces have destroyed and are destroying more armed power of our enemies—troops, planes, tanks and guns—than all the other United Nations put together."

The aim of this destruction was plainly stated by Premier Joseph Stalin in his order of the day for May Day, 1942, when he declared: "We are fighting this war for our country, for justice and freedom! We have no aim of seizing foreign territory or of conquering foreign peoples. Our aim is clear and honorable: We want to free our Soviet land from the German fascist beasts. . . . To bring about this aim, we must destroy the German fascist army and the German invaders to the last man, as far as they do not lay down their arms. There is no other way. We can do this, and we must do this, whatever happens."*

That the Allied Nations are not yet fully cooperating with the Soviet Union was recently (April, 1942) pointed out by a prominent American who said at a patriotic meeting:

"There is still a tendency, as at the beginning, to separate the Soviet Union from the central core of the United Nations. Such a tendency harms not only the Soviet Union, but the peoples of America and England, and of the entire world.

"How can one speak realistically of an effective United Nations, when we have not established a full military alliance with the one military force today holding Hitler from subjugating the world? Certain steps toward concerted military action have been taken in other theatres of the war. Such are the establishment of the unified command, under Generalissimo Chiang Kai-shek, for Eastern Asia, and, under General MacArthur, for the Southwest Pacific.

* *New York Times*, May 1, 1942.

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Surely, then, in the main theatre of the war—Europe, where the Axis will either stand or fall by the outcome, where *we* shall either stand or fall by the outcome—there should be no separation, but a synchronized, parallel, and fully cooperative offensive action on the part of Great Britain and the United States with the Soviet Union through the establishment of a Western Front."*

* Following a visit paid by V. M. Molotov, the People's Commissar of Foreign Affairs of the U.S.S.R., to the United States and England, it was announced simultaneously in Washington, London and Moscow on June 11, 1942 that the U.S.A. and the U.S.S.R. had reached "full understanding" with regard to "the urgent tasks of creating a second front in Europe in 1942," and that a "Treaty of alliance in war against Hitlerite Germany and her associates in Europe, and of collaboration and mutual assistance thereafter" for 20 years, had been concluded between Great Britain and the Soviet Union.

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13

The North Pacific Pincers

"JAPAN'S SCHEME OF CONQUEST GOES BACK A HALF A century," stated President Roosevelt in his State of the Union message to Congress on January 6, 1942. "It is not merely a policy of seeking living room, it is a plan which includes the subjugation of all peoples in the Far East and the Islands of the Pacific, and the domination of that ocean by Japanese military and naval control of the western coasts of North, Central and South America."

The outline of this scheme of conquest was first revealed to an unbelieving world in 1929 with the publication of the Tanaka Memorial, then called, oddly enough, a "Communist invention." Even a year or so before the Japanese attack on Pearl Harbor, when Admiral Taussig of the U. S. Navy quoted the Tanaka Memorial during hearings of the Senate Committee on Naval Affairs, Taussig was disavowed by his superiors. Yet this Memorial gave ample warning of Japan's plans for world conquest.

"If we want to control China," Premier Tanaka wrote in this document, "we must first crush the United States, just as in the past we had to fight in the Russo-Japanese war. But in order to conquer China we must first conquer Manchuria and Mongolia. In order to conquer the world we must conquer China. If we succeed in conquering China, the rest of the Asiatic countries and the South Sea countries will fear us and surrender to us."

Expressed quite candidly in the Memorial is the immediate aim of Japanese imperialism: Asiatic domination.

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The partnership with Hitler is a means to this end. It made war with Britain a certainty long before its actual outbreak. The conflict with China and designs upon the Dutch East Indies made the attack against the United States inevitable. Thus, the interests of the United States, Great Britain, China, and the Soviet Union in Asia and in the North Pacific merge in defense against a common enemy. Only by their collaboration can Japan be defeated.

Why did most Americans not realize earlier that Japan was a dangerous enemy? Why did many Americans think that Russia was the chief danger in the Pacific?

To answer these questions we must recall that the United States and Great Britain had much to do with the rise of the Japanese Empire. Describing the beginning of America's relationship with Japan, President Roosevelt said on December 15, 1941: "In 1853 Commodore Perry knocked on Japan's doors. In the next few years those doors began to open; and Japan, which had kept aloof from the world, began to adopt what we call Western civilization; during those early years, the United States used every influence it could exert to protect Japan in her transition stage."

The opening of Japan proved to be a profitable step on the part of the United States. It appealed to shipowners and industrialists. But it also began an era of development within Japan. Before Perry, Japan had been quite isolated from the world and hostile towards all other nations. Sailors shipwrecked on her shores were usually imprisoned. Her ports were closed to ships of other nations. But the Americans and British needed her trade and coaling stations. "We should make another appeal to the sovereign of that country (Japan) to ask him to sell to our steamers not the manufactures of his artisans, or the results of the

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toil of husbandmen," said Secretary of State Webster following Commodore Perry's visit, "but a gift of Providence (coal) deposited by the Creator of all things in the depths of the Japanese islands for the benefit of the human family."*

Early in the penetration of western ideas into Japan there occurred the Meiji "revolution" of 1867-1868. Although supported by the peasantry, this was in essence a shift in power between two cliques of the Samurai, who continued to rule Japan under the Meiji dynasty as they had under the Shoguns before. A feudal and military caste, their outlook remained feudal and military even when they went into banking, shipping, industry, and commerce. Feudal customs remained, and the peasantry gained nothing. Development of a large internal market to this day is still retarded in Japan, forming one of the chief weaknesses of the country's economy. Dominant in political life are about eight families, Mitsui, Mitsubishi and others, some more than 300 years old, who control two-thirds of the capital wealth of the country. Under the Emperor and the army they hold the real power, dictating Japan's foreign policy, which seeks to offset discontent at home by conquest abroad. Nevertheless in its time the Meiji overthrow represented a progressive trend in Japanese life and is so remembered by the mass of the people.

The meeting of two progressive historical trends: the rise of northern industrial power in the United States and the Meiji era in Japanese life were dominant features in the relationship of the two countries. Basically these trends were contradictory, finding their chief point of friction over China, but they served as a connecting link

* Tyler Dennett, *Americans in Eastern Asia* (New York: The Macmillan Company, 1922), p. 261.

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through which both countries had a wide latitude of satisfactory exchange on a friendly basis. Furthermore, the balance of power in the Pacific was maintained by the United States and Britain by utilizing Japan as a counterforce to the expansion of Russia.

Americans have been inclined to regard Japan as a little brother, cunning perhaps and occasionally even treacherous, but one who could never rise to the stature of a serious enemy. Japan was a beautiful Lilliputian land, charming when visited, but not destined for any particular role in world affairs. The Japanese Intelligence Service profited by this convenient attitude.

The Japanese Imperial Government has long been aware of the fact that the firmer the foothold Japan could get on the Asiatic mainland, the more impregnable would be her position in the Pacific. If Japan were to hold the Maritime area of Soviet Asia, Kamchatka, the Kommander Islands, and the Chukot headland, that is, the whole Pacific coast, not only would she be practically unassailable except by vastly superior naval and air forces, but would be able to carry out offensive warfare against Alaska and Canada, expanding her dominion, at least for a time, over the North Pacific and even into the North American continent.

Alaskan defenses in the North Pacific have been strengthened for this reason. The violent protests of the Axis nations against the strengthening of American defense outposts, not only in the North Atlantic but in the North Pacific, even before the United States was formally at war with Japan or Germany, only demonstrate how important are these strategic arctic outposts for aerial defense and offense today.

One of these violent protests occurred in September,

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1941, when two great flying boats travelling via the Soviet arctic airways arrived at Nome, Alaska, bringing a Russian air mission to the United States in response to American promises of material assistance for Russian resistance to Nazi invasion. The mission was headed by Mikhail M. Gromov, the Soviet flyer who with two companions in 1937 flew the transpolar route, the shortest route, from Moscow to California in less than 60 hours. At the spot where they landed there is now an obelisk with the inscription: "They found the world of transportation a cylinder, they left it a sphere." Japan protested both transpolar flights.

"The establishment of northern bases that facilitate contact between Soviet Russia and America opens up serious possibilities," fumed the *Japan Times-Advertiser* (mouthpiece of the Foreign Office) after the 1941 flight. "Our country cannot stand idly by while a scheme of northern encirclement is in the making." A system of warplane service between the American and Asiatic continents across "latitudes north of Japan" would be one part of the anti-Japanese encirclement, the other portion of which had been demonstrated in the south and west, the editors described.

The range of modern aircraft is enormous. Bases can be located far inland and still be within a day's striking range of enemy targets. Of this the Soviets are well aware; they have undertaken some interesting demonstration flights within their vast country. In 1936, a Red Army air crew under the late Valery Chkalov undertook a nonstop flight from Moscow to Kamchatka via the arctic. From Moscow, they flew straight north to Franz Josef Land, then veered across the Arctic Ocean and Northeastern Siberia, landing on an island off Kamchatka 56 hours after taking off.

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Two centuries ago Vitus Bering required more than a year by Siberia's inland waters just to reach Kamchatka from St. Petersburg, and 130 years ago the Russian garrison at the Petropavlovsk naval base was so isolated that six months had passed before they finally received the news of Napoleon's sacking of Moscow, and, not knowing that Napoleon's Grand Army had been annihilated in the winter retreat from Moscow, they repaired to the local orthodox church to pray for the deliverance of the Fatherland. The radio and airplane have changed all that. If, in 1936, the Soviet airmen had flown the same mileage (about 5,000 miles) due north across the Pole, they would have landed in Oregon, as Chkalov did in 1937 on the first good-will flight in history to link the U.S.A. and the U.S.S.R. by air across the North Pole. Had the Soviet airmen in 1936 flown the same mileage due south from Kamchatka across the Southwest Pacific, they would have landed "down under" on the Australian mainland. Trips by heavy aerial transport planes of 5,000-mile range from Vladivostok to Port Darwin are even suggested by some specialists in the use of aircraft for military transport by air route as feasible today, such a route being safe from the submarine menace and many times swifter than convoy shipping.*

Modern Soviet warplanes bring Vladivostok within 24 hours' flying time of Moscow. This was demonstrated as early as 1938 with a non-stop test flight made by the Soviet pilot Kokkinnaki. The flight was also undertaken to survey a 50-mile-wide Trans-Siberian military airway which has since, no doubt, been fully equipped for all kinds of emergency services.

Some authorities believe that the main offensive base of

* *New York Times*, editorial, March 22, 1942.

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the Far Eastern air arm is located at Vladivostok. This is quite unlikely, for the city itself is too close to Manchukuo. It is far more probable that the fabled Soviet underground hangars and camouflaged airports have been constructed well to the east and north of the main railway line, and are probably situated on the protected side of the mountains which run close to the seaboard.

The modern bomber plane is in some respects a form of artillery (aerial artillery, if you will), with an immensely extended range; it is able to carry its "projectile" inland or out to sea to drop it on targets a thousand miles from its base. Therefore, the location of bases from which bomber planes operate is a strategic problem quite different from the selection of heights on which to locate naval or land fortifications limited to the firing range of projectile artillery. Even from Khabarovsk, Tokyo is less than 800 miles away, and almost any better protected point a few hundred miles inland of Khabarovsk would be suitable for bomber operations against Harbin, Kirin, Dairen, or the Japanese Islands of Hondo, Hokkaido and Karafuto (southern Sakhalin). Likewise, bombers based far from the frontiers in Japanese-held territory, would still be within striking distance of towns in the Soviet Far East.

Japan is well aware of the threat which a strong Soviet air arm presents. But that Japan does not strike north now should not mislead us into believing that she will not do so. It is well that an intercontinental warplane service along latitudes north of Japan has been made possible by Soviet airmen, and by the pioneers of Alaskan and Canadian lines. Soviet, Alaskan and Canadian airmen, accustomed to transferring large shipments of airborne freight, have developed a tradition of cooperation, and Soviet Asia

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is prepared to link her system with the general system of North Pacific airways.

To Japan any form of Soviet-American communications in the north is objectionable. She has sought to obstruct the proposed Alaskan-Siberian road, i.e. a motor highway across Alaska and Siberia with an air-sea ferry across the Bering Strait, linking the Canadian railhead above Edmonton, Canada, with the Trans-Siberian spur north of Irkutsk in Siberia, and also linking the arsenals of Detroit with the front in Manchukuo. Japan's recent attack on the Aleutians also aims in part at disrupting American-Soviet North Pacific sea and air communications.

In the present military operations, the Far Eastern front of Soviet Asia is quiescent. But if the past is any guide to the future of Japanese ambition, it can safely be predicted that, barring a crushing military defeat elsewhere, the time will come when Japan will launch an all-out offensive against the Soviets in Asia. Her motive will be military-strategical rather than economically aggressive. The territory of Soviet Asia is not nearly so desirable a prize for conquest as are the areas in the South Pacific that Japan has overrun. But the Maritime Territory has repeatedly been described by the Japanese as a "pistol" pointed at the heart of Japan.

When the time comes, Japan's attempt to conquer Soviet Asia will be only an "incident" in her master plan to conquer the Pacific. A successful invasion of Siberia would be extended toward the complete subjugation of China and the occupation of the west coast of North America. That Japan holds no part of the Soviet Pacific coast today, after several attempts to occupy not only the Maritime area, but also Kamchatka and northern Sakhalin, is due to the strength of Soviet defenses in Asia, defenses supple-

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mented now by those of the United States in Alaska and of Canada in British Columbia. The defenses in North America stretch like a causeway to the Orient, that is, to within 2300 miles of Tokyo, bringing that city inside the range of a round-trip sweep by the bombers now being built. Planes based on North Pacific aircraft carriers can approach even closer. The late Brigadier General William Mitchell, who foresaw the importance of air power in modern warfare, once said of Alaska: "It is the most important strategic place in the world." But Alaska as a base would be valueless if the Russians lost control of their own Pacific coast and the Chukot headland. Its continued military importance rests upon the closest kind of cooperation between the United States, Canada, and the Soviet Union.

The coast of the United States and Canada, jutting as far into the Pacific Ocean as the Aleutian Islands, forms one jaw of a gigantic pincers; the Soviet Pacific seaboard and the coast of North China constitute the other jaw. Should these jaws ever be brought together, the pincers would squeeze the vitals of Japan's feudalistic militarists into a death-agony groan that would be their last gasp.

Japan is alive to this danger; the Japanese High Command understands that the United Nations can deliver a crushing military defeat to her island empire only in the North Pacific. That is why Japan has been bending over backward in an effort to avoid war with the Soviet Union.

But to assume that Japan plans no aggression in the north would be to miscalculate utterly the nature of Japan's plan. The North Pacific must become a scene of bitter conflict, and that before long. The unpredictable nature of Japanese military action today is sufficient reason for perpetual vigilance.

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14

Soviet Asia's Military Strength

WHEREVER WE CAME INTO CONTACT WITH RED ARMY MEN IN Soviet Asia, we encountered a great interest in *Amerika*, as they say when referring to the United States. It was evident that they regarded *Amerika* as a great power in the world and particularly in the Pacific, and as a potential ally, not as an enemy.

It became ever more apparent as we travelled east of the Urals that big things were doing in Soviet Asia in respect to military preparedness. Mass training of ski troops was going on throughout Siberia. Airports were under construction in many places in Central Asia, in Western Siberia, and in Kazakhstan. Sham battles (we were told) were being fought in the wildernesses, and on railroad sidings one occasionally saw whole trainloads of troops, artillery, and tanks going to and coming from maneuvers. Army newspapers carried accounts of special long-distance training flights by bomber commands.

After the Nazi invasion of 1941, Soviet dispatches began to refer more and more to the participation of Siberian-trained ski troops in fighting on the eastern front, and there have been many descriptions of the activities of Kirghiz and Kazakh cavalry units west of Moscow. The Kuibyshev radio has recently reported that hundreds of thousands of men are being newly trained, beyond the Urals, completely out of range of both German bombers and Nazi observation planes.

Official references to the use of Siberian troops on the

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European front have been taken by many to indicate the transference of whole divisions from the Soviet Far East. This need not be true. Western Siberia and Kazakhstan have been used for a long time for the training of troops for the European front. All conditions are present here for efficient training: isolation from large cities (insuring against too much diversion and espionage); vast uninhabited areas (providing room for artillery maneuvers and flying); variety of terrain (allowing simulation of actual war conditions). In Central Asia, Eastern Kazakhstan, and Eastern Siberia the same set of conditions was utilized for the training of personnel for the Far Eastern Front. In this way, over a period of years, each Soviet republic, region, and territory in Soviet Asia has built the framework and core of large armies, which have become more and more powerful and better equipped as industries have developed, particularly during the years of the Second and Third Five Year Plans (1933-1942).

Training

Soviet Asia's role in the struggle against Hitler is pictured in an article published on January 14, 1942, in the *Information Bulletin* of the Soviet Embassy in Washington, D. C. In part, the article reads: "Training of reserve Red Army units of the Siberian Military Area is in full swing. Men and commanders are mastering new weapons and learning new methods of warfare. Practical training goes on day and night. Night fighting is receiving special attention.

"The Siberian Military Area was considered in peacetime one of the Red Army's best for ski training. Skis are still more popular now. All infantry men, artillery men,

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engineers, and signallers undergo ski training. Machine guns, artillery, and mortars are mounted on skis."

Moscow radio broadcasts have described ski-tanks, or armored aerosleds used to wage a war of movement in the Russian winter. For such new weapons as these the vast snow-covered plains of Siberia offer exceptional training grounds.

The Soviet Government has always stressed military aviation. Gigantic airplane construction plants were built in the Urals and elsewhere in Soviet Asia, and one of us was told of the use of the conveyor system in some of these plants as long ago as 1935. When in 1938 it became apparent that the world was coasting headlong into war, Soviet military aviation was placed first on the agenda of all military policy bodies. Training of airmen expanded and began to encompass tens and even hundreds of thousands of youth. Training airports were built one after another in all areas where there was sufficient room for pilot training, notably in Kazakhstan, Central Asia, and Western Siberia. The training of pilots became a public mass movement.

Even at the outbreak of war in 1939 Soviet air training was on a scale only now being attained in the United States and by the British Commonwealth Air Training Scheme. It is interesting that an identical policy in respect to the location of training schools is followed by the Soviet Union, Canada, and the United States; that is, the schools are established outside the areas of concentrated population.

Not peculiar to Soviet Asia, but characteristic of the preparedness effort of all Russia for the past ten years, is the *Ossoaviakhim*. This Society for Assistance in Defense and Aviation-Chemical Construction has done almost as

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much as the Red Army in the training of soldiers, cavalry, and pilots. It has members in every section of Soviet Asia, even in the most isolated communities, and it has trained millions in air-raid precaution work, with the result that air-raid protection is as well organized in Tashkent, Alma-Ata, and Vladivostok as in Moscow and Leningrad. The society has trained literally tens of thousands of workers to fly during their leisure hours. As long as twelve years ago, 40,000 *Ossoaviakhim* members were expert glider pilots; an even larger number had passed the tests for parachutists. In 1937, the Society undertook the organization of riding clubs, and during the next four years it trained enough riders to man numerous cavalry regiments. It is an interesting point that at a time when most high commands were giving up the horse in favor of mechanization, the Russians decided merely to modify the role of cavalry as an important auxiliary to all the armed forces. The Komsomol (Young Communist League) and the Young Pioneers (Soviet children's organization similar to our Boy and Girl Scouts) also have contributed to the preparation of Soviet youth for war.

Manpower Reserves

Before the war every Soviet citizen on reaching the age of 19 was liable for military duty, including most inhabitants of the sparsely-populated arctic and subarctic regions. The only exemptions were the members of small nationalities, among whom many volunteered for service and were trained by the Red Army. In Soviet Asia, where the proportion of young people is considerably higher than in European Russia, as many as 500,000 were called up for service each year.

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Military Setup

From the beginning, the military setup in Soviet Asia has been based on the possibility of a two-front war, even of a three-front war: east, west, and south. To cope with this, the war effort of Western Soviet Asia was integrated with the defensive scheme of the European front, while Central and Eastern Soviet Asia were given the task of dealing with a foe who might strike from the Pacific.

The territory from the Urals to the Pacific has long been divided into a number of military districts with separate armies. At the head of each district is a military council of three members, including the army commander. The exact number of districts and the headquarters cities have not been made public. It is known, however, that in Soviet Asia, in addition to the Siberian Military Area, there is the Central Asian Military District, the Cheliabinsk, Krasnoyarsk and Irkutsk districts, and the Far Eastern Military Area referred to as the Far Eastern Front, also divided into the Chita, Khabarovsk, Vladivostok, and possibly other districts.

Thus, in the Far East, Soviet Asia has its own military establishment, independent within the general Soviet defensive plan and independently supplied. It consists of two armies, the corresponding air forces, and the Pacific fleet.

On August 7, 1929, by order of the Revolutionary War Council of the U.S.S.R., the Special Far Eastern Army was established. This was the Soviet Union's reply to the Manchurian seizure of the Chinese Eastern Railway. After the battles at Changkufeng Hill and Lake Khassan in 1938, in which the Japanese were defeated, the Far Eastern Army was awarded the title "Red Banner," following which the Army was divided into two armies, namely The First and

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Second Red Banner Far Eastern Red Armies. Combined, these two armies are called the Far Eastern Front. When we were last in Soviet Asia, the commander of the Far Eastern Front was General Iosif Rodionovich Apanasenko, formerly in charge of the Central Asian Military District. Under him were Colonel-General Gregory M. Shtern, commanding the First Army, with headquarters somewhere in the Maritime Region, and Lieutenant-General Ivan S. Koneff, in command of the Second Army with headquarters somewhere in the Chita Region.

After the Nazi invasion of the Ukraine, Koneff was transferred to the Eastern Front in Europe, where he distinguished himself and was advanced to the rank of Colonel-General. Colonel-General Shtern has also been reported transferred to the European front. Owing to the gravity of the North Pacific situation, at least one of the three Marshals of the Soviet Union is reported to have been assigned the leadership in the Far East.

On October 19, 1941, London dispatches quoted the Moscow radio as saying that large numbers of Siberian and Mongolian troops were being rushed westward to reinforce the Red Army defending Moscow. This, in our opinion, did not mean the transference of the 20 to 30 divisions that some American military analysts assumed it to signify. It takes a minimum of fifteen trains to convey the personnel of one infantry division without supplies. Considering that the trip across Siberia under the best of circumstances takes nine days, the shifting of a large number of divisions would require so much time that it could not be considered useful as an emergency measure. What seems to have occurred is that a small number of trained divisions were gradually withdrawn from the Far East, their places being taken by fresh recruits.

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Just what is Soviet Asia's military strength?

Air Force. Prior to the German invasion, one half of the Soviet air force is believed to have been stationed at Chita, Blagoveschensk, Khabarovsk, Komsomolsk and other bases. It is not likely that any considerable proportion of this air force has been shifted to Europe. Experienced pilots may have been transferred and their places taken by more recently trained men, but the available evidence indicates the maintenance of an undiminished air force in Soviet Asia.

The advance of Soviet aviation in the Far East during the past few years is strikingly illustrated by the following eye-witness account by Peter C. Rhodes. After visiting Eastern Siberia in July, 1941, Mr. Rhodes wrote: "I often saw the daily mail plane pass over and drop its train of gliders. The Russians were already towing trains of eight or nine gliders on their mail routes, dropping one at each small town with the mails. When gliders were cut off the train, they came down very gracefully and swiftly, like giant hawks."* Gliders were demonstrated in Crete and in the Crimea to be invasion weapons, and there is nothing in the books that says they could not be used to counter an offensive in the Far East.

The Army. Strength is variously estimated. On June 4, 1938, the United States Ambassador to the Soviet Union, Joseph E. Davies, made this entry in his journal: "According to reliable information there are approximately 450,000 to 600,000 Soviet armed troops in the eastern area. It is stated, however, that the Japanese believe that for every Japanese soldier in Manchukuo, the Soviets maintained in Manchuria three Soviet soldiers. The Japanese armed forces in Manchuria are estimated to be from

* *PM,* August 11, 1941.

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150,000 to 200,000 in number. This checks with other information current here."*

In 1939, Major Ernest Dupuy wrote that the two Soviet Far Eastern Armies were composed of fifteen divisions totalling 225,000 men, a tank corps of 5000 men with 1000 vehicles, 25,000 frontier troops, 15 regiments of area defense forces of about 15,000 men, plus ordnance and supply units. Altogether this amounts to some 290,000 men.† In 1938, the Japanese estimated these forces to number 840,000 men.

On September 18, 1941, after his trip through Siberia, *United Press* correspondent Herman Habicht cabled from Shanghai that "Russian defense forces east of Lake Baikal in the area in which any new Russo-Japanese war would be fought if the Japanese invaded Russia, are said to total 'at least' 40 infantry divisions, an undisclosed number of mechanized units, and 'plenty' of airplanes of all types. These forces do not include the well-trained and well-equipped forces of Russia's ally, Outer Mongolia, which is administered from Ulan-Bator. There are also naval forces based on Vladivostok."‡

Since the average Soviet division numbers nearly 20,000 men (larger than either the American or German divisions) Habicht's estimate gives the Russians about one million armed men in the Far East. A recent *United Press* dispatch from Chungking gives the Red Army strength in the Soviet Far East as 630,000 troops, 3000 airplanes, and 2300 armored vehicles. Moreover, it was said that Russia

* *Mission to Moscow,* Joseph E. Davies, Simon and Schuster, New York, 1941.

† Major R. Ernest Dupuy, *World in Arms* (Harrisburg: Military Service Publishing Co., 1939).

‡ *New York Times,* September 19, 1941.

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had spent 2,000,000,000 rubles in building 4,000 blockhouses along the Soviet-Manchukuo frontier.

The strength of these armies is one of the world's great military secrets. Estimates of this strength are as varied as is the authority of those making them. All that we can add, based on what we saw, is that they are "very large and very powerful."

Land defenses. In the east as in the west, the Russians have devoted great attention to the manufacture and installation of that "god of modern warfare," artillery. Even the Japanese admit that practically every yard of the Soviet-Manchukuo frontier can be covered by enfilading fire from guns of every caliber, in thousands of pillboxes and fortresses. Vladivostok, Khabarovsk, Komsomolsk, and Chita are protected by anti-aircraft barrages that would be as effective as those that protect Moscow and Leningrad, should any historic event call them into action.

That the Japanese know something about these border fortifications is revealed by an article written by a Japanese officer, N. Imoto, and originally published in Japan. Translated into English this article reads:

"Going eastward, one reaches the upper current of Shakheitsu, near boundary marks No. 23 and 24. Before one's eyes appears a large Soviet *tochka* (fort) and its artillery salvos, clearly heard, make one aware of the state boundary for the first time and most emphatically. It stands high on the hill . . . looking down on the valleys. . . . The newly constructed soldiers' barracks are half-hidden in snow, and glitter under the evening sun. To the north are five other *tochkas.* To the east countless telegraph poles dot the military road going down the mountain to Komissarsky. This road is 15 km. long and permits the passage of trucks even in summer, when the surround-

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ing land is swampy. During the fighting at Changkufeng trucks moved steadily along this road.

"From this point the state frontier goes down to the plain. The Hiriyahari barracks are built not far from boundary mark No. 25, in the upper reaches of the Usachi river. In the thickness of a forest of deciduous trees are hidden newly-built barracks for forty or fifty Frontier Guards. Behind the mountain is a field for target practice. Each night the sound of rifles is heard.

"Often one hears the sound of exploding dynamite. At 30° below zero the ground is deeply frozen; but in spite of difficulties encountered at this season of the year, the Soviet Army is at work from morning till night in the construction of fortifications."*

The Soviet Union has good reason to construct these fortifications. The Frontier Guards mentioned by Imoto are a Soviet military arm in Asia of which little is known, but which had had more military experience than any other before the war with Finland. The Frontier Guards are disposed along the frontiers of Iran, Afghanistan, China, and Manchukuo. Their role is to prevent spies and diversionists from entering the Soviet Union and to block the leakage of information by messengers going out of the country. The Frontier Guards are among the most trusted units of the Commissariat for Internal Affairs, responsible for the execution of exceptionally difficult assignments.

The Pacific Fleet. If the Far Eastern Armies and land defenses are a military enigma, the Soviet Pacific Fleet is doubly so. Its commander since February 23, 1941, has been Vice-Admiral Ivan S. Iumashev. The authoritative Small or Malaia Sovietskaia Encyclopedia limits itself to recording that the Soviet Pacific fleet consists of "100 or

* Quoted from *Amerasia,* New York, Sept., 1940, p. 236.

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more vessels" in addition to smaller units. Major Dupuy is authority for the statement that in 1938-1939 this fleet consisted of 18 destroyers, 90 submarines, 80 coastal motorboats, 32 gunboats and 75 armored motor boats (mosquito boats), with naval bases at Vladivostok and Komsomolsk, and auxiliary bases at Nikolaievsk, Okhotsk, Petropavlovsk-in-Kamchatka and Nagayevo.

An official Soviet spokesman, Vice-Admiral N. G. Kuznetsov, Commissar of the Soviet Navy, said on Navy Day in July, 1939, that "The Pacific Ocean Fleet is a graphic example of the growth of our Navy as a whole. The first war vessel appeared in the Far East only five or six years ago. That was the first submarine. Now the number of submarines and surface vessels of the Pacific Ocean Fleet is already more than one hundred. I do not count the petty units like torpedo boats. Yes, Comrades, in the Far East we have more than one hundred warships."*

On September 19, 1941, the *New York Times* correspondent in Shanghai, Mr. Douglas Robertson, cabled his paper that "the Soviet submarine fleet stationed in northern waters is divided into five flotillas that before January [1941] consisted of 60 old-type 'shark' and 42 new-type vessels built two or three years ago. Since then the submarine fleet has been enlarged by hulls and engines shipped from European Russia and assembled at northern bases. . . .

"The Soviet Far East Fleet consists of submarines, torpedo boats, gun boats, and small, fast destroyers. The torpedo boats carry two torpedoes, antiaircraft guns, machine guns, radio, and five men. The lighter gunboats carry torpedoes and minelaying equipment. Russia apparently is concentrating on swift, compact surface craft, and

* *Pravda*, July 24, 1939.

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eight torpedo boats are being built monthly at northern bases."

If Robertson's statement that 42 submarines were built two or three years ago is correct, and there is good reason to believe that it is, then we can take it for granted that at least an equal number have been constructed since that time, for the manufacturing capacity of the Far Eastern shipyard and machine-building industries has more than doubled in capacity in the past two years.

In 1938, the Red Navy occupied first place in the world in the number of submarines and torpedo motor boats.* The reason for the Russian decision to concentrate on fast mosquito boats in the Pacific is twofold; first, because of the lack of construction facilities for large warships, and second (and of equal importance), because the battle areas of the Sea of Japan are open to Japanese air attack from two directions. Large Soviet naval units operating here would be exposed to constant aerial bombardment. Mosquito boats are less vulnerable. The Japanese author, Yasuo Mishima, says: "These high-speed small torpedo boats are really like houseflies which can cause the death of the cattle."† If Japanese warships should succeed in passing these flitting gadflies of the sea, they would do so only to enter mine-fields and come within range of the heavy coastal artillery.

River warships are an important adjunct of the Soviet battle fleet. The Argun, Amur, and Ussuri Rivers form the border line between Russia and Manchukuo, and on these rivers the Russians maintain strong flotillas of gunboats, mosquito boats and river monitors, armed with heavy guns.

* *The Small Soviet Encyclopedia* (Russian, 1940 edition).

† *Russia at War,* August 14, 1941, quoting *Parade,* London, Nov. 1938.

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It was to the naval-air establishment of the Maritime Territory that the Japanese specifically referred when they said that the Soviet Union had a "pistol" pointed at the heart of Japan. Military aircraft and submarines based at Vladivostok port, 700 air miles from Tokyo, and at other Maritime naval stations should be able to establish an almost complete blockade of Japan's west coast, all the way from the port of Nagasaki to the northernmost Kurile Islands. As for defense, Mishima wrote in 1938: "Vladivostok is indeed very difficult of access by land or by sea; in fact it has become impregnable."*

Before the start of the Third Five Year Plan in 1938 and before the double-tracking of the Trans-Siberian Railway and the expansion of Far Eastern manufacturing facilities, the situation of the Soviet Far East in a prolonged struggle would have been very difficult. This is not so today. The industrial development east of Lake Baikal has made possible prolonged defensive warfare. Metallurgical industries at Komsomolsk and at Petrovsk-Zabaikalsk, southeast of Lake Baikal, produce 1,500,000 tons of steel a year, while Komsomolsk has become one of the most elaborate military bases in the east, almost entirely self-contained and connected by excellent highways and railroads with all military positions in the Soviet Far East.

At the Eighteenth Congress of the Communist Party of the Soviet Union in 1939, Vice-Admiral Kuznetzov, then Commander of the Pacific Fleet, told the assembled delegates: "In the Far East we have against us an enemy whom we do not fear, but to underestimate whom would be dangerous. You know, the old Czarist generals, having Japan against them, only boasted instead of preparing, and

* *Ibid.*

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said that they would defeat the Japs by snowing them under with hats. You are all acquainted with the results."

The Russians of the Soviet era will not be caught unprepared. They have felt the power of Japan in battles at Lake Khassan in 1938, at Nomonhan in 1939, and at many other points since then. Each time they defeated the enemy, but only a small portion of total Japanese strength was encountered. So the Soviets have continued to prepare.

At the Eighteenth Party Congress, Colonel-General Shtern dealt with these preparations, amusing the delegates and tantalizing the foreign press when in all seriousness he gave the following "detailed information": "As regards the development of our military and naval forces in the Far East, all that need be said is that 1934 was nothing like 1931, nor was 1935 like 1934, and let us put it bluntly, in 1939, the Red Army and Navy in the Far East are even stronger than in 1938."

All that we can add is that Soviet Asia's military strength certainly is greater in 1942 than it was in 1939.

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15

Soviet Asia Tomorrow

"THE TRADITIONAL RELATIONSHIP BETWEEN THE UNITED States and the Russian people has been one of friendship and good will," Mr. Davies wrote to the State Department in 1938, when he was about to retire as American Ambassador to the Soviet Union. "Past historical events and other considerations account for the fact that there is undoubtedly great friendliness on the part of the Russian people toward the United States."*

"This friendliness," responded Maxim Litvinoff, at a farewell banquet in honor of Ambassador and Mrs. Davies on June 6, 1938, "has not found expression in many diplomatic acts, documents, or external manifestations. But I flatter myself to think that there is a great deal of latent, unexposed, unproclaimed and unwritten mutual sympathy and respect between the peoples of our two countries. Love and friendship without words are sometimes the truest and the sincerest."†

These statements were made four years ago. Today this love and friendship have found expression in both words and actions. The United States is not the only nation, however, that is experiencing a deepening sympathy with and admiration for the people of the Soviet Union.

A great improvement in Canadian-Soviet relations has taken place since the outbreak of war between Germany

* *Mission to Moscow,* Joseph E. Davies. Simon and Schuster, New York, 1941.

† *Ibid.*

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and the U.S.S.R. Until recently, Canada had no diplomatic relations with Russia. This has been remedied. "We look forward to the cooperation of the Russian nation with our empire and our Allies in the rebuilding of the world in which all people will enjoy the blessings of liberty and justice," wrote John Bracken, Premier of the Canadian Province of Manitoba, to the Soviet Ambassador to the United States on the occasion of the celebration of the Anniversary of the Russian Revolution, November 7, 1941.

Canada's Premier expressed an opinion held today not only by Canadians but by Australians for they, too, have recently announced their awakening to the sharp necessity of an exchange of representatives between Moscow and Canberra, and publicly recognized the fact that "Russia is a great Pacific power and that her policy, security and destiny in the Pacific are of immense importance to Australia's future."*

The British position was well expressed in March, 1942, by Sir Stafford Cripps when he said to the American people: "If we are equally determined to face the realities of the situation, we shall find the Russians the most doughty allies and helpers. We must appreciate their point of view just as they must appreciate ours, because a sound solution [for peace] will only come out of a sympathetic mutual understanding of the objectives and of the fears of all those who seek to work together."† The Anglo-Soviet 20 year pact concluded in June 1942 has laid the foundations for a firm and lasting peace in Europe as well as for common action to achieve victory.

China's leaders, of course, have long recognized the ad-

* Heard by the Columbia Broadcasting System and reported in *New York Herald Tribune*, March 12, 1942.

† *Life*, March 9, 1942.

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vantage of both economic and military cooperation with the Soviet Union, and have repeatedly declared their solidarity with the U.S.S.R.

American-Soviet-Chinese-British solidarity (including Canadian and Australian) is, therefore, no longer an academic question. It is a fact that has resulted from vital military necessity. To defeat the Axis, the United Nations must rely to a considerable extent on the millions of hard-fighting Soviet and Chinese soldiers. The Soviet Union must have American, Canadian and English-built planes, tanks, artillery and supplies. War materials can be delivered from our shores as readily to Petropavlovsk-on-Kamchatka, as to Murmansk and Archangel, and raw materials can with equal facility be delivered from the Soviet Union to our munitions plants. So there is no transportation obstacle to collaboration.

By such cooperation not only can the United Nations defeat the enemy in Europe but they can set up, also, impregnable bastions of defense or offense in Alaska, Canada, China, and the Far Eastern territories of the Soviet Union for the purposes of defeating the Axis in Asia.

When the Axis military machine has been crushed by the combined might of the United Nations, the next great problem confronting the world will be economic rehabilitation.

That Soviet Asia will play a great rôle in this task must be self-evident. We have outlined the reasons for it in this book. We have traced the rise in history of Russian Asia as a dominant land power in the North Pacific and the leading sea power in the Arctic. We have shown that industry thrives throughout the Asiatic portion of the Soviet Union and that natural resources are being exploited on

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an unprecedented scale. It is inconceivable that this industrialization will cease, or even diminish to any appreciable degree after the war.

Soviet Asia's granaries almost certainly will be at the front of the life-lines extended to hungry people not only in the devastated European Soviet Republics but in starving Europe generally. Her coal will supply the people's heat, her forests and mills the materials for thousands of new homes and factories, and her textile mills a good portion of the new warm clothing that they will need. In Tashkent, capital of the Uzbek Republic, for example, a textile mill is already producing sufficient cloth to make one suit of clothes a year for eight million people, enough textile goods to have supplied all of Siberia's pre-revolutionary population with cloth. The cotton for this cloth is grown in the Uzbek Republic which supplies more than 60 per cent of the raw cotton produced in the Soviet Union, and the capacity of the Uzbek, like that of all the Central Asian Republics, has not nearly approximated its maximum. This is true, also, of the other republics of Soviet Asia with respect to raw materials and industrial potential.

We recall standing in Vladivostok in the midst of a long line of people gathered in front of a store which was, as the Russians said, "putting out" one pair of shoes and a few yards of cloth to each customer. A shipment had just arrived via the Trans-Siberian and word had been passed around without benefit of radio advertising.

In the crowd waiting to enter the store was a Russian who, spotting us as foreigners, had an idea. Coming over, he said, "You can come with me. I'll tell the militiaman at the door that you are foreign tourists. He will let you in ahead of the line and you can then see from the inside

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how brisk the trading is." And, half-jesting, he added, "Perhaps you could purchase an extra pair of shoes for my wife."

We followed our friend to where the militiaman stood and arrived just in time to see him eject a lad who had tried to edge in ahead of his fellow citizens.

"Hooligan!" shouted the people derisively, and pushed him this way and that until he could not find a place anywhere in the long line. This little scene changed our friend's mind.

"Perhaps we'd better not try to beat the line," he decided, and back we went, as with a flourish to retrieve his pride he exclaimed, "What a market! The shelves will be empty in a few hours, but another shipment will soon come in. We don't have to go abroad, like the Japanese, to sell our goods. We have an unsaturated market right here at home."

We learned later that the shipment of cloth had come from Tashkent.

The industries of Soviet Asia and the extent to which the almost illimitable natural resources have been cultivated are the result of a deliberate industrial program carried out by the Soviets during the past fifteen years. One of the first steps in that plan was to make the various republics as quickly self-sufficient as possible. In the past, for example, Vladivostok imported coal and prepared-fish products when there was plenty of coal in the local ground and abundant fish in the Pacific waters off the Siberian coast. Vladivostok and the Soviet Far East no longer import either coal or fish. Enough coal is being mined in the region for home consumption, while fishing has been expanded until the annual catch of fish not only supplies

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fully all local needs but yields a large surplus which is now exported to other regions.

But what has been accomplished is neither as much as the Soviet leaders desired nor as much as Soviet Asia's natural resources could have yielded. The reasons for this are two-fold. Although there are millions of industrial workers in Soviet Asia and more are being trained constantly, there is a lack of skilled labor. Furthermore, a multitude of machines have been and are being made, but there still is an acute shortage of machinery. These factors, basic to war-time collaboration, are going to be just as significant in post-war collaboration, and will be detonators for the new importance of Soviet Asia in world affairs. Until this present war, Soviet Asia's exchange of goods and services was largely with the Soviet Republics of Europe. With the advent of war in the Pacific, however, Soviet Asia, while still of vast importance as a supply base in the rear of the European front, was projected like a loaded shell to burst on the world scene, contributing her share as an ammunition dump for the anti-Axis armies in Asia. From the Siberian taiga and the Central Asian foothills, Soviet Asia emerged from isolation to take her place in the world at large, producing for the needy everywhere.

In the "shape of things to come" we discern two avenues of collaboration between the United Nations after the war: between the nations that already have a relatively high scale of living, supplying one another's shortages for the benefit of all their citizens, and an over-all collaboration to assist the peoples of China, Malaya, India and Iran to advance to somewhere near the level of the more forward nations.

South and southeastern Asia is the homeland of nearly one half of mankind; it is also one of the world's greatest

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areas of economic debility, the standard of living being so low that the total income of the nearly one billion people is much less than that of the 130,000,000 Americans in the United States. So long as this inequality exists, the world cannot achieve social balance. If economic and political subjugation continues to be imposed on the backward nations of Asia after the war, it will simply breed another war. So long as there are colonies there will be a struggle for their redistribution; so long as there are colonial people, there will be wars of liberation.

Cooperation between the more advanced nations has now become a fact. There were no obstacles in the foreign policy of the U.S.S.R. to prevent it. This policy has repeatedly expressed the desire on the part of the Soviet Union to maintain peaceful relations with friendly states and to strengthen economic ties with them. It found expression even prior to the war when American and British engineers contributed largely to the industrialization program carried out under the Five Year Plans. And it is certainly to be expected that the war will have shown us the wisdom—indeed, the necessity—of a continuing friendly collaboration between the United Nations and the Soviet Union, and of developing it into a genuine pooling of economic and mental resources for the benefit of human progress.

However, it is in the sphere of communication that the future seems brightest.

At the end of the war, the United States and Britain will have on hand more ships than they will be able to use. After World War One hundreds were laid up to rot. Soviet Asia could absorb scores of ships: for the overseas international supply routes, for transport on Siberia's vast inland waters, for the northern sea route which, it will be

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recalled, arose through employment of the emergency ice-breakers disposed of by the Entente to Soviet Russia after the last World War. The possibility of linking the Great Lakes with the Mackenzie River (which flows into the Arctic Ocean) and thus creating a new waterway to the top of the world in America, has been discussed. In the Soviet Union, plans are being studied for joining by canals the rivers Kama, Chusovaya, Tura, Tobol, Irtysh, Ob, and the Yenisei, and these in turn, through the lower Tunguska, with the Lena river, thus providing a waterway through the heart of Siberia to the top of the world in Asia, a waterway that will require ships to be effective. On completion, traffic would be able to pass from the heart of Asia, via the Arctic Ocean, under ice-breaker convoy, to the heart of America.

Although almost every mile of American and Canadian railways is now in use, there will again be a duplication of lines, rolling stock, and dead spurs after the war. Canada and the United States will have thousands of miles of excess railways due to this duplication. All surplus rails, signals, semaphores, locomotives and even much outmoded equipment could be sold to Soviet Asia.

Such highway projects as the Alaska-Siberian Highway, which is now being developed, could be extended in time to complete a highway from Buenos Aires to Paris, traversing all of South America, the United States, Canada, and Soviet Asia into Europe—a highway 25,000 miles long that would bring new life to great sparsely settled portions of the earth, and which would establish close and friendly links that no future would-be "world conqueror" could break. Bering Strait would be negotiated by swift and powerful ice-breaker ferries which, like those used on Lake Baikal before tunnels were built along its southern shore,

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would carry entire truck-trains back and forth between the continents' ends.

Finally, regarding air transportation, aviation visionaries predict a Buenos Aires-Paris airline, passing over the United States, Canada and the Soviet Union to Paris; and of a New York-Chungking airline, via the North Pole and Soviet Asia. Airports for such projects either already exist or are being built as part of the war program of Canada and the Soviet Union. Regular air transportation between Moscow and New York, via the Soviet and Canadian Arctic, is almost a reality.

Although the Soviet Union has excellent aircraft plants, it has not yet mastered the production of commercial airplanes on the scale and of the quality that factories in the United States can turn out. Soviet Asia has thousands of miles of uncharted airways merely because of the lack of commercial planes. These airways, too—some of them links in world-girdling systems—could be promoted with American-built planes obtained in exchange for Soviet Asian raw materials.

To achieve the objectives that we have outlined will require a new approach to commerce with the U.S.S.R., already declared in the United States-Soviet agreement of June 12, 1942, providing for continued mutual aid in the war against the Axis and expressing mutual interests in peacetime collaboration after the war.

Today supplies are flowing from the United States not only to embattled Russia but to Britain, China, and other members of the United Nations, with English, American and Norwegian ships providing the chief ferry service. There is no reason why these supply routes could not be continued into the post-war period of reconstruction, and

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maintained with much greater facility and speed, and at less cost, than is possible at present.

From being an arsenal of democracy, the United States can become a workshop of democracy, providing the Soviet Union—and Soviet Asia, in particular—with the machinery needed to complete the conquest of desert and ice. In return, Soviet Asia can supply the United States with such ingredients of machinery as tungsten from Djida, manganese from the Lake Baikal region, copper from Kazakhstan, rare earths and silk from Kirghizia, nonferrous metals from Tadjikistan, and tin from Yakutia.

If the peoples of the Soviet Union, the United States and Canada develop the "identical industrial democracies" that we are told they will,* the consuming capacity of home markets is destined to expand and the backward millions of Asia are about to begin a successful rise to an economic well-being far above the subsistence level. But the scientific instrumentation and realization of this great democratic trend can come about only through careful planning of the kind that has characterized the Five Year Plans of the Soviet Union. The difference between the new plan and the Five Year Plans would be mainly dimensional: the unit of time would be longer and the blueprint would be scaled to the globe. There are only two fundamental requirements for its achievement: mutual trust and cooperation.

So we come to the end of our book.

We have tried to paint an objective picture of Soviet Asia, its habitants and its institutions. Those institutions are undeniably of the people's creation, and of their choos-

* *Nine Chains to the Moon*, R. Buckminster Fuller, J. B. Lippincott Co., Philadelphia, 1938.

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ing. Were it otherwise, Soviet Asia would either long since have passed from the stage of history or its industrialization would still be a dream worthy of realization. But Soviet Asia is very much alive. The people of Soviet Asia are fulfilling their quota of that fighting spirit without which victory will not come, and the soil of Soviet Asia is yielding the materials for the tools with which that victory can now be won.

And when the war is over the people and resources of Soviet Asia will contribute in large measure to the maintenance of a stable peace economy.

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BIBLIOGRAPHY

Baransky, N. N., *Physical Geography of the U.S.S.R.* Moscow, 1938.

Beard, Charles A., and Mary R., *The Rise of American Civilization.* New York: The Macmillan Company, 1930.

Berg, L. S., *Priroda SSSRa.* Moscow-Leningrad: Uchpedgiz, 1937.

Bogorod, D., *Yakutskaia ASSR.* Moscow, 1939.

Bolshakov, M., and Rubinsky, V., *Kamchatskaia Oblast.* Moscow, 1934.

Butler, G. G., *The Sea Route to Siberia.* London: Anglo-Siberian Trading Syndicate, 1890.

Caldwell, Erskine, *All Out on the Road to Smolensk.* New York: Duell, Sloan and Pearce, 1942.

Carmen, Kimmel and Walker, *Historic Currents in Changing America.* Chicago: John C. Winston Company, 1938.

Collins, Percy McDonough, *A Voyage Down the Amoor.* New York: D. Appleton and Company, 1860.

Davies, Joseph E., *Mission to Moscow.* New York: Simon and Schuster, 1941.

Dennett, Tyler, *Americans in Eastern Asia.* New York: The Macmillan Company, 1922.

Dupuy, Major R. Ernest, *World in Arms.* Harrisburg, Pa.: Military Service Publishing Co., 1939.

Ellsberg, Commander Edward, *Hell on Ice.* New York: Frederick A. Stokes Company, 1938.

Freidin, I., *Land of Soviets.* Moscow, 1937.

Fuller, R. Buckminster, *Nine Chains to the Moon.* New York: J. B. Lippincott Company, 1938.

Ginsberg, I. S., *Vneshnye Torgovly SSSRa.* Moscow, Sotsekgiz, 1937.

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Golder, F. A., *Russian Expansion on the Pacific, 1641-1850.* Cleveland: The Arthur H. Clark Company, 1914.

Graves, Gen. W. S., *America's Siberian Adventure, 1918-1920.* New York: Jonathon Cape & Harrison Smith, 1931.

Griscom, Lloyd C., *Diplomatically Speaking.* Boston: Little, Brown & Co., 1940.

Gruber, Ruth, *I Went to the Soviet Arctic.* London: Victor Gollancz Ltd., 1939.

Halle, Fannina, *Women in the Soviet East.* New York: E. P. Dutton, 1938.

Halle, Frau Fannina W., *Women in Soviet Russia.* New York: The Viking Press, 1933.

Hartwig, Dr. G., *The Polar and Tropical Worlds.* Chicago, Ill.: Hugh Heron, 1877.

Hoare, J. Douglas, *Arctic Exploration.* London: Methuen & Co., 1906.

Hobbs, William H., *Peary.* New York: The Macmillan Company, 1936.

Joerg, W.L.G., *Brief History of Polar Exploration Since the Introduction of Flying.* New York: American Geographic Society, 1930.

Johnson, Henry, *The Life and Voyages of Joseph Wiggins, F.R.G.S.* New York: E. P. Dutton & Company, 1907.

Johnson, Hewlett, *The Soviet Power.* New York: Modern Age Books, 1940.

Kantarovich, Anatole, *Amerika v Borbe za Kitai.* Moscow: Sotsekgiz, 1935.

Kennan, George, *Tent-Life in Siberia.* New York: G. P. Putnam's Sons, 1910.

King, Beatrice, *Changing Man: The Education System of the USSR.* New York: The Viking Press, 1937.

Kingsbury, Susan M., and Fairchild, Mildred, *Factory, Family and Women in the Soviet Union.* New York: G. P. Putnam's Sons, 1935.

Kolesov, G., and Potapov, S., *Sovietskaia Yakutiia.* Moscow: Sotsekgiz, 1937.

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Krivtsev, S. S., *Kazakhstan i Kirghizia.* Moscow, 1930.

Krupskaia, Nadezhda K., *Memories of Lenin.* New York: International Publishers, 1930.

Kunitz, Joshua, *Dawn Over Samarkand, the Rebirth of Central Asia.* New York: Covici, Friede, 1935.

Lamont, Corliss, *Soviet Russia vs Nazi Germany.* New York: American Council on Soviet Relations, 1941.

Laut, Agnes C., *The Conquest of the Great Northwest.* New York: George H. Doran Company, 1918.

Lenin, V. I., *Selected Works.* Moscow: Cooperative Publishing Society of Foreign Workers in the U.S.S.R., 1935-1940.

Lenin, V. I., *Collected Works,* Russian Edition, Vol. xxvii. Moscow.

Littlepage, John D., and Bess, Demaree, *In Search of Soviet Gold.* New York: Harcourt, Brace and Company, 1938.

Matters, Leonard, *Through the Kara Sea.* London: Skiffington & Son, Ltd., 1932.

Mikhailov, Nicholas, *Land of the Soviets.* New York: Lee Furman, Inc., 1939.

Milton, John, *Paradise Lost.* London: John Sharpe, 1816.

Nansen, Fridtjof, *Through Siberia, The Land of the Future.* London: William Heinemann, 1914.

Nichols, Jeanette Paddock, *Alaska.* Cleveland: The Arthur H. Clark Company, 1924.

Norton, Henry Kittredge, *The Far Eastern Republic of Siberia.* London: George Allen & Unwin, Ltd., 1923.

Okun, S., *Rossiisko-Amerikanskaia Kompania.* Moscow-Leningrad: Sotsekgiz, 1939.

Papanin, Ivan, *Life on an Ice-floe.* New York: Julian Messner Co., 1939.

Pesni Narodov Delnevo Severa (Songs of Peoples of Far North). Leningrad, 1935.

Pritt, D. N., *Light on Moscow.* London and New York: Penguin Books, Ltd., 1939.

Ravenstein, E. G., *The Russians on the Amur.* London: Trubner and Co., 1861.

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Reed, John, *Ten Days That Shook the World.* New York: The Modern Library, 1935.

Sarkizov-Serazini, I., *In the Land of Tamerlane and the Hot Sun.* Moscow: Molodaia Gvardia, 1929.

Sergeyev, M. A., *Sovietskii Ostrova Tikhovo Okeana.* Leningrad, 1938.

Sever Poet (anthology of poems by poets of northern peoples). Leningrad: Gikhl, 1939.

Schuman, Frederick Lewis, *American Policy Toward Russia since 1917.* New York: International Publishers, 1926.

Shestakov, A. V., *A Short History of the USSR.* Moscow: Cooperative Publishing Society of Foreign Workers in the U.S.S.R., 1938.

Sibirtsyev, N., and Itin, V., *Severny Morsky Put i Karskiye Ekspeditsi.* Moscow, 1936.

Sigerist, Dr. Henry E., *Socialized Medicine in the USSR.* New York: W. W. Norton & Co., Inc., 1937.

Sloan, Pat, *Russia Without Illusions.* New York: Modern Age Books, Inc., 1939.

Smolka, H. P., *40,000 Against the Arctic.* New York: William Morrow & Company, 1937.

Stalin, Joseph, *Leninism, Vol. II.* New York: International Publishers.

Stefansson, Vilhjalmur, *The Northward Course of Empire.* New York: The Macmillan Company, 1924.

Stern, Prof. V. M., *Economic Geography of Asia.* Leningrad: Uchpedgiz, 1940.

Stewart, George, *The White Armies of Russia.* New York: The Macmillan Company, 1933.

Strong, Anna Louise, *Red Star of Samarkand.* New York: Coward-McCann, Inc., 1929.

Strong, Anna Louise, *The Road to the Grey Pamir.* Boston: Little, Brown and Company, 1931.

Strong, Anna Louise, *The Soviets Expected it.* New York: The Dial Press, 1941.

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Tagzhanov & Dzhansugarov, *Kazakh Poetry*. Moscow: Gikhl, 1934.

Taracouzio, T. A., *Soviets in the Arctic*. New York: The Macmillan Company, 1938.

Tompkins, Stuart Ramsey, *Russia Through the Ages*. New York: Prentice-Hall, Inc., 1940.

Vitkovich, V., *Kirghizia*. Moscow: Molodaia Gvardia.

Ward, Harry F., *In Place of Profit*. New York: Charles Scribner's Sons, 1933.

Webb, Sidney and Beatrice, *Soviet Communism: A New Civilization*. New York: Charles Scribner's Sons, 1938.

Weise, V. Y., *History of Exploration of Soviet Arctic*. Archangel, 1934.

Williams, Albert Rhys, *The Soviets*. New York: Harcourt, Brace and Co., 1937.

Yudkevitch, Lev, *At the Gates of Hindustan (Tadjikistan)*. Moscow: Federatsii, 1932.

STANDARD REFERENCE BOOKS

U. S. Foreign Relations, State Department, Washington, D. C. 1920, Vol. III. 1918, Russia, Vol. II. 1918, Publication 81.

Conference on Limitation of Armaments, Washington, D. C. Nov. 12, 1921-Feb. 6, 1922.

Malaia Sovietskaia Encyclopedia. Moscow: Gosizdat.

Dalnevostochny Krai v Tsifrakh. Khabarovsk, 1932.

Handbook of Siberia and Arctic Russia. Vol. 1, General. Compiled by the Geographic Section of the Naval-Intelligence Division, Naval Staff, Admiralty, London (circa 1918).

Stalingrad, a Handbook. Stalingrad Kraiizdat, 1936.

General Information Regarding the Territory of Alaska. U. S. Department of the Interior, Washington, D. C., 1931.

Istoriya Grazhdanskoi Voiny SSSRa. Moscow: Gosizdat, 1936.

History of the Communist Party of the Soviet Union. Moscow: Foreign Languages Publishing House, 1939.

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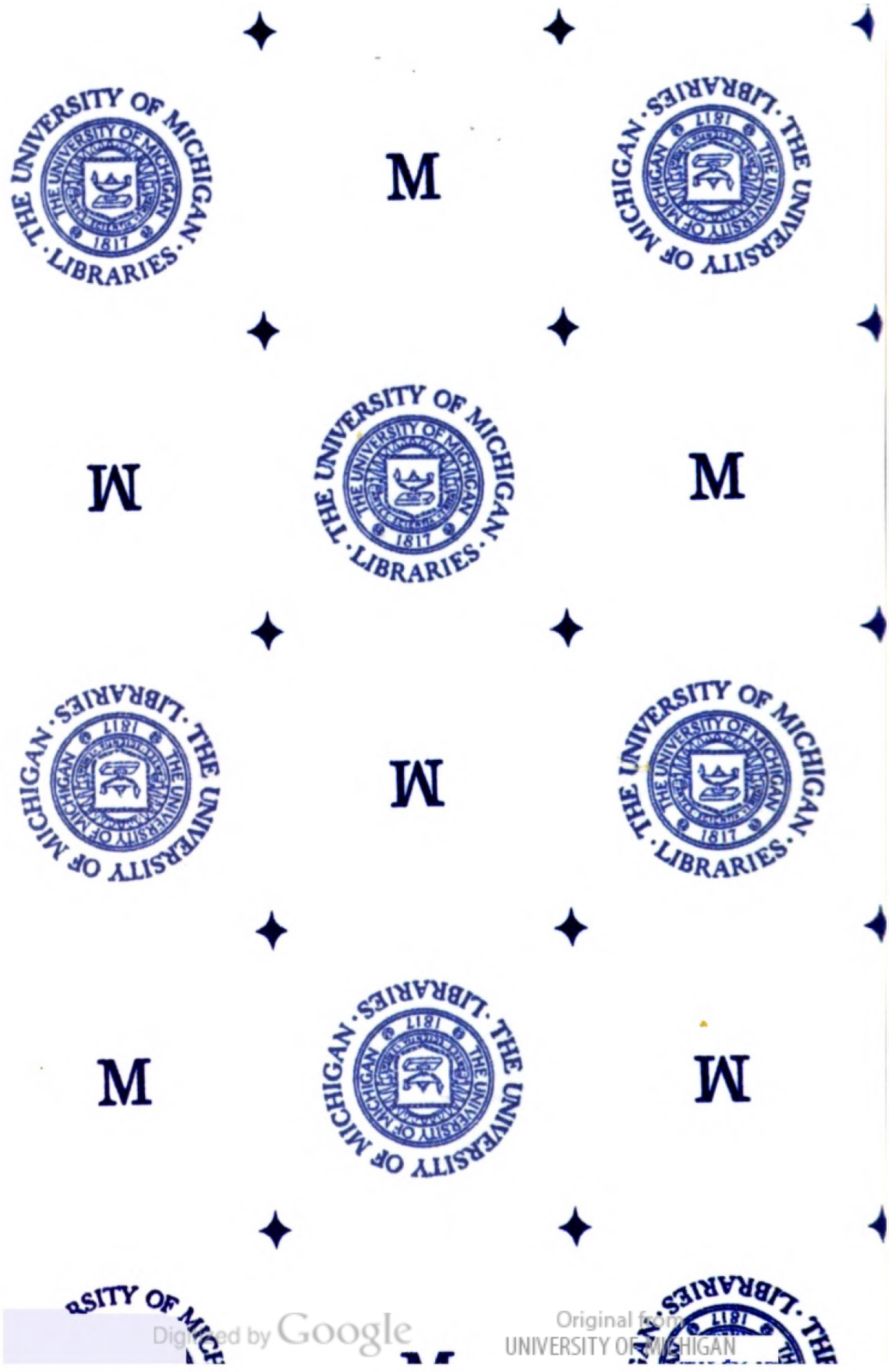

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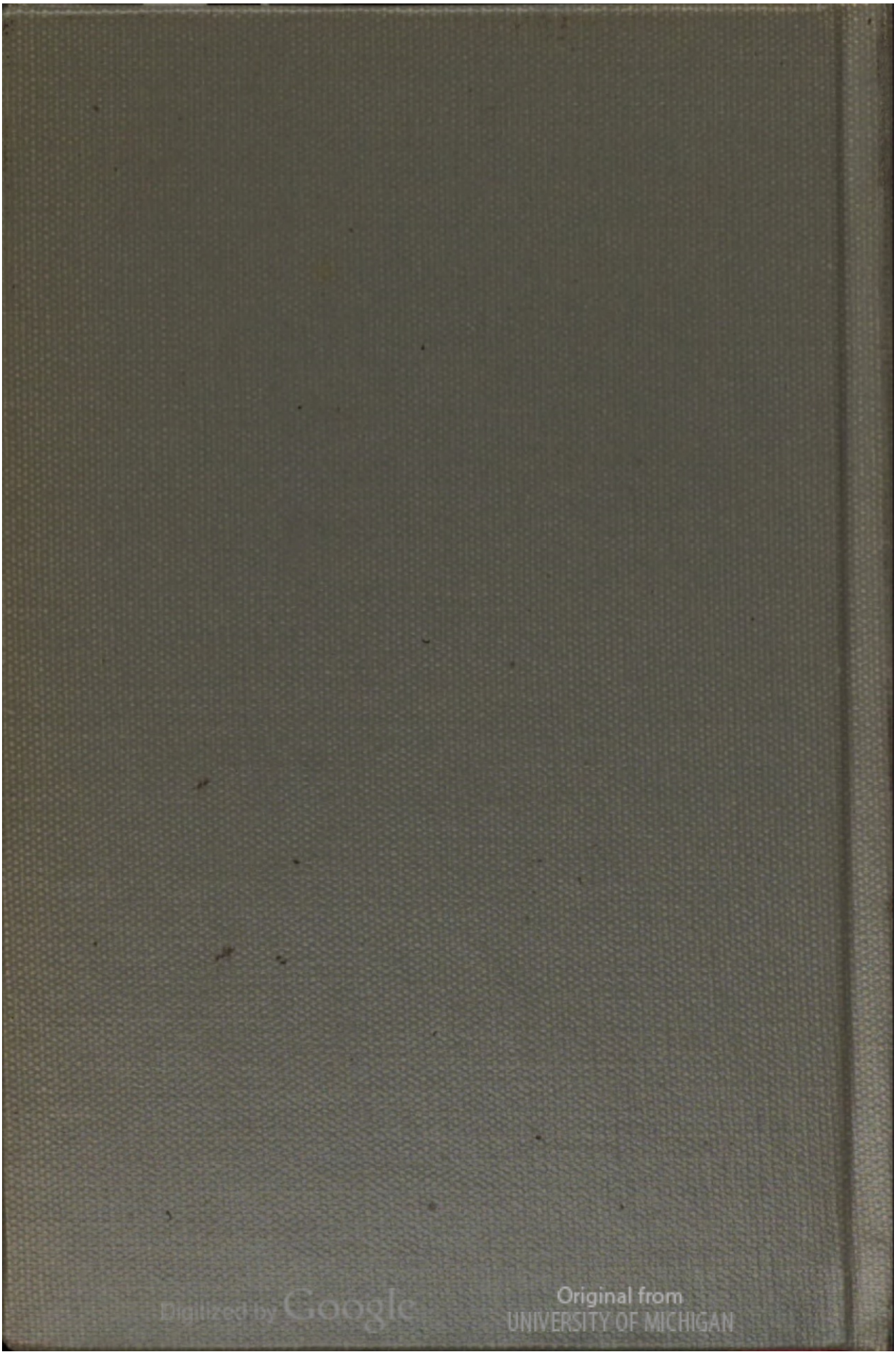
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